

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	("5773075").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 11:53
S2	4	("4310468").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 08:48
S3	2	("6063144").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 08:54
S4	4	("4211695").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 08:57
S5	3	("1958462").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 09:00
S6	2	("5171329").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 09:10
S7	2	("5928696").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/11/23 18:20

EAST Search History

S8	0	("lipids").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 11:53
S9	159756	lipids	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:53
S10	296412	wax	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:54
S11	4234	S9 near5 extract	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:54
S12	0	S11 near6 candle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:55
S13	670	S11 and S10	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:55
S14	24281	candle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:56

EAST Search History

S15	4	S13 and S14	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:56
S16	101469	esterification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:56
S17	74	S13 and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 12:00
S18	2	S17 and S14	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 11:57
S19	2169932	oil fat	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 12:01
S20	65417	S19 near5 S10	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 12:01
S21	301	S20 near5 S14	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 12:01

EAST Search History

S22	25	S21 and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 12:10
S23	1	((DIETER) near2 (TISCHENBORF)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2007/11/23 10:38
S24	8014	cooking adj oil or cooking adj fat	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 10:40
S25	1198	food adj residue?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 10:41
S26	627812	fat? oil?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 10:42
S27	1982	candel?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 10:42
S28	2	S24 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 10:43

EAST Search History

S29	22	candle? adj wax?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 10:44
S30	20	S29 and S26	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:16
S31	35	("1935946" "1954659" "20010013 195" "20020005007" "200201444 55" "20020144455" "2003000825 7" "20030008257" "20030017431" "20030022121" "20030046860" " 20030046860" "20030057599" "2 0030061760" "20030091949" "20 030110683" "3630697").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:24
S32	12	S31 and S26	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:27
S33	12	"6503285"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:28
S34	2	S27 and S24	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:31
S35	0	S29 and S24	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:32

EAST Search History

S36	32073	recycled and (fat? or oil?)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:32
S37	4	S36 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:33
S38	300998	wax	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:33
S39	6697	S36 and S38	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:33
S40	4	S39 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:34
S41	687340	food	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:35
S42	1672	S41 and S39	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:35

EAST Search History

S43	4	S42 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:36
S44	785335	waste	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:36
S45	51564	S44 and S26	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:36
S46	9236	S45 and S38	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:36
S47	6	S46 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:38
S48	48134	triglyceride? or triglycerol?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:38
S49	53	S25 and S48	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:39

EAST Search History

S50	46	S49 and S38	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:40
S51	1147	S48 and S38 and S44	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:41
S52	1	S51 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:41
S53	0	S24 and S25 and S26 and S27	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:42
S54	0	S27 and S25	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:43
S55	5479424	prepare? or make	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:43
S56	19	S55 and S29	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:43

EAST Search History

S57	19239	S41 and S48	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:44
S58	18	S56 and S48	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 11:47
S59	5	"6758869"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 13:18
S60	48134	triglyceride? or triglycerol?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 13:18
S61	4	S59 and S60	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 13:26
S62	22	candle? adj wax?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 13:27
S63	14	"6497735"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:37

EAST Search History

S64	20788	animal near2 fat	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:38
S65	48134	triglyceride? or triglycerol?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:38
S66	3827	S64 and S65	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:38
S67	300998	wax	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:38
S68	1698	S66 and S67	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:38
S69	24665	candle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:39
S70	32	S68 and S69	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 14:41

EAST Search History

S71	11	"6645261"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:28
S72	102673	esterification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:29
S73	48134	triglyceride? or triglycerol?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:29
S74	6747	S72 and S73	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:29
S75	61	S74 and hydrogenate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:32
S76	30	S75 and nickel	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:41
S77	46	freed adj fatty adj acid	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:46

EAST Search History

S78	300998	wax	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:46
S79	5	S77 and S78	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:47
S80	5570404	free fatty acids	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:47
S81	24665	candle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:48
S82	9587	S80 and S81	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:48
S83	245	S82 and S73	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:48
S84	10	S83 and hydrogenate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:51

EAST Search History

S85	2799644	free adj fatty acids	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:51
S86	5871	S85 and S81	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:51
S87	49	S86 and hydrogenate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 15:52
S88	0	("animalfat").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/11/23 18:20
S89	804399	animal fat	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:20
S90	2506334	animal oil	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:21
S91	2210649	vegetable oil	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:21

EAST Search History

S92	474413	vegetable fat	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:21
S93	237267	S89 and S90 and S91 and S92	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:21
S94	24665	candle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:21
S95	1116	S93 and S94	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:22
S96	48134	triglyceride? or triglycerol?	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:22
S97	179	S95 and S96	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:27
S98	0	S97 and hydrogenate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:23

EAST Search History

S99	10	S97 and hydrogenate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/23 18:23
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=> s candle?

L1 5464 CANDLE?

=> s candle wax

3549 CANDLE

2575 CANDLES

5148 CANDLE

(CANDLE OR CANDLES)

84138 WAX

58426 WAXES

105455 WAX

(WAX OR WAXES)

L2 140 CANDLE WAX

(CANDLE(W) WAX)

=> s candle (4w) material

```

3549 CANDLE
2575 CANDLES
5148 CANDLE
      (CANDLE OR CANDLES)
1624775 MATERIAL
2162788 MATERIALS
3250240 MATERIAL
      (MATERIAL OR MATERIALS)
L3      108 CANDLE (4W) MATERIAL

=> s food (4w) residue
      402585 FOOD
      82112 FOODS
      425584 FOOD
            (FOOD OR FOODS)
      396696 RESIDUE
      387033 RESIDUES
      693495 RESIDUE
            (RESIDUE OR RESIDUES)
L4      3048 FOOD (4W) RESIDUE

=> s triclyceride or triacylglycerols
      3 TRICLYCERIDE
      3 TRICLYCERIDES
      6 TRICLYCERIDE
            (TRICLYCERIDE OR TRICLYCERIDES)
      6090 TRIACYLGLYCEROLS
L5      6096 TRICLYCERIDE OR TRIACYLGLYCEROLS

=> l4 and l5
L4 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l4 and l5
L6      0 L4 AND L5

=> s (fat# or oil#)
      306434 FAT#
      923843 OIL#
L7      1119609 (FAT# OR OIL#)

=> s cooking (3w) residue
      53891 COOKING
      79 COOKINGS
      53910 COOKING
            (COOKING OR COOKINGS)
      396696 RESIDUE
      387033 RESIDUES
      693495 RESIDUE
            (RESIDUE OR RESIDUES)
L8      203 COOKING (3W) RESIDUE

=> s l8 and l7
L9      49 L8 AND L7

=> s l9 and l5

```

L10 0 L9 AND L5

=> s cooking (3w) waste
53891 COOKING
79 COOKINGS
53910 COOKING
(COOKING OR COOKINGS)
405473 WASTE
196884 WASTES
455129 WASTE
(WASTE OR WASTES)

L11 272 COOKING (3W) WASTE

=> s l11 and l5

L12 0 L11 AND L5

=> s l12 and l7

L13 0 L12 AND L7

=> s frying

7441 FRYING
91 FRYINGS
L14 7445 FRYING
(FRYING OR FRYINGS)

=> s l14 and l7

L15 4943 L14 AND L7

=> s l15 and l5

L16 42 L15 AND L5

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
L2 140 S CANDLE WAX
L3 108 S CANDLE (4W) MATERIAL
L4 3048 S FOOD (4W) RESIDUE
L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6 0 S L4 AND L5
L7 1119609 S (FAT# OR OIL#)
L8 203 S COOKING (3W) RESIDUE
L9 49 S L8 AND L7
L10 0 S L9 AND L5
L11 272 S COOKING (3W) WASTE
L12 0 S L11 AND L5
L13 0 S L12 AND L7
L14 7445 S FRYING
L15 4943 S L14 AND L7
L16 42 S L15 AND L5

=> s l16 and l1

L17 0 L16 AND L1

=> s l16 and wax

84138 WAX

58426 WAXES
 105455 WAX
 (WAX OR WAXES)
 L18 0 L16 AND WAX

 => s 116 and 13
 L19 0 L16 AND L3

 => s 17 and 13
 L20 25 L7 AND L3

 => s 120 and 15
 L21 0 L20 AND L5

 => s wax
 84138 WAX
 58426 WAXES
 L22 105455 WAX
 (WAX OR WAXES)

 => s 122 and 15
 L23 273 L22 AND L5

 => s 123 and 114
 L24 0 L23 AND L14

 => s 114 and 17
 L25 4943 L14 AND L7

 => s 125 and residue
 396696 RESIDUE
 387033 RESIDUES
 693495 RESIDUE
 (RESIDUE OR RESIDUES)
 L26 195 L25 AND RESIDUE

 => s 126 and 15
 L27 0 L26 AND L5

 => d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
 L2 140 S CANDLE WAX
 L3 108 S CANDLE (4W) MATERIAL
 L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING

L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5

=> s 11 and 15

L28 2 L1 AND L5

=> d 128 1-2 ibib abs

L28 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:964402 CAPLUS

DOCUMENT NUMBER: 141:397979

TITLE: Wax and wax-based products

INVENTOR(S): Murphy, Timothy A.; Shepherd, Michael D.

PATENT ASSIGNEE(S): Cargill, Incorporated, USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004221503	A1	20041111	US 2003-434447	20030508
US 7192457	B2	20070320		
CA 2525088	A1	20041125	CA 2004-2525088	20040506
WO 2004101720	A1	20041125	WO 2004-US14090	20040506
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1620533	A1	20060201	EP 2004-760892	20040506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
US 2006272200	A1	20061207	US 2006-502977	20060811
PRIORITY APPLN. INFO.:			US 2003-434447	A 20030508
			WO 2004-US14090	W 20040506
AB The present lipid-based wax compns. commonly include a polyol fatty acid ester component (made up of partial and/or completely esterified polyols). Generally, at least a portion of the polyol fatty acid ester was subjected				

to a transesterification reaction. Lipid-based wax compns. having a m.p. of .apprx.48°. to .apprx.75°. can be particularly advantageous for use in forming candles. The wax may contain other components such as mineral wax, plant wax, insect wax, and/or other components. The polyol fatty acid ester component can include triacylglycerols such as those derived from plant oils (soybean oil, palm oil, etc.). The polyol ester component may be characterized based on one or more of its phys. characteristics, such as SFI-40, SFI-10, typical crystal structure, IV, melting curve, and/or other properties.

REFERENCE COUNT: 95 THERE ARE 95 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:74076 CAPLUS

DOCUMENT NUMBER: 110:74076

TITLE: Structure of triacylglycerols in four less known seed oils

AUTHOR(S): Afaq, Shahla; Rauf, Abdul; Khan, Mushfiquddin; Osman, S. M.

CORPORATE SOURCE: Dep. Chem., Aligarh Muslim Univ., Aligarh, 202 002, India

SOURCE: Journal of the Oil Technologists' Association of India (Mumbai, India) (1987), 19(4), 78-80
CODEN: JOTIAC; ISSN: 0030-1485

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The glyceride structures of 4 lesser known seed oils, namely Aleurites moluccana, A. montana, Fimbristylis quinqueangularis, and Chickrassia tabularis, were determined by a combination of selective enzymic hydrolysis, TLC, and gas-liquid chromatog. The predominant triacylglycerols of F. quinqueangularis and C. tabularis are triunsatd. triacylglycerols (GU3). A. moluccana contains monosatd. diunsatd. triacylglycerols (GSU2) in major amts., and A. montana has disatd. monounsatd. triacylglycerols (GS2U) and GSU2) in almost equal quantity.

=> s dehydrogenat?

L29 54685 DEHYDROGENAT?

=> s lipids

L30 216440 LIPIDS

=> l29 and l30

L29 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s l29 and l30

L31 94 L29 AND L30

=> s l31 and l5

L32 1 L31 AND L5

=> d l32 ibib abs

L32 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:102409 CAPLUS
 DOCUMENT NUMBER: 140:300486
 TITLE: Impact of unusual fatty acid synthesis on futile cycling through β -oxidation and on gene expression in transgenic plants
 AUTHOR(S): Moire, Laurence; Rezzonico, Enea; Goepfert, Simon; Poirier, Yves
 CORPORATE SOURCE: Department de Biologie Moleculaire Vegetale, Universite de Lausanne, Lausanne, CH-1015, Switz.
 SOURCE: Plant Physiology (2004), 134(1), 432-442
 CODEN: PLPHAY; ISSN: 0032-0889
 PUBLISHER: American Society of Plant Biologists
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Arabidopsis expressing the castor bean (*Ricinus communis*) oleate 12-hydroxylase or the *Crepis palaestina* linoleate 12-epoxygenase in developing seeds typically accumulate low levels of ricinoleic acid and vernolic acid, resp. We have examined the presence of a futile cycle of fatty acid degradation in developing seeds using the synthesis of polyhydroxyalkanoate (PHA) from the intermediates of the peroxisomal β -oxidation cycle. Both the quantity and monomer composition of the PHA synthesized in transgenic plants expressing the 12-epoxygenase and 12-hydroxylase in developing seeds revealed the presence of a futile cycle of degradation of the corresponding unusual fatty acids, indicating a limitation in their stable integration into lipids. The expression profile of nearly 200 genes involved in fatty acid biosynthesis and degradation has been analyzed through microarray. No significant changes in gene expression have been detected as a consequence of the activity of the 12-epoxygenase or the 12-hydroxylase in developing siliques. Similar results have also been obtained for transgenic plants expressing the *Cuphea lanceolata* caproyl-acyl carrier protein thioesterase and accumulating high amts. of caproic acid. Only in developing siliques of the tag1 mutant, deficient in the accumulation of triacylglycerols and shown to have a substantial futile cycling of fatty acids toward β -oxidation, have some changes in gene expression been detected, notably the induction of the isocitrate lyase gene. These results indicate that anal. of peroxisomal PHA is a better indicator of the flux of fatty acid through β -oxidation than the expression profile of genes involved in lipid metabolism

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
 L2 140 S CANDLE WAX
 L3 108 S CANDLE (4W) MATERIAL
 L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5

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L11      272 S COOKING (3W) WASTE
L12      0 S L11 AND L5
L13      0 S L12 AND L7
L14      7445 S FRYING
L15      4943 S L14 AND L7
L16      42 S L15 AND L5
L17      0 S L16 AND L1
L18      0 S L16 AND WAX
L19      0 S L16 AND L3
L20      25 S L7 AND L3
L21      0 S L20 AND L5
L22      105455 S WAX
L23      273 S L22 AND L5
L24      0 S L23 AND L14
L25      4943 S L14 AND L7
L26      195 S L25 AND RESIDUE
L27      0 S L26 AND L5
L28      2 S L1 AND L5
L29      54685 S DEHYDROGENAT?
L30      216440 S LIPIDS
L31      94 S L29 AND L30
L32      1 S L31 AND L5

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=> s residue or recycle or waste or remains

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396696 RESIDUE
387033 RESIDUES
693495 RESIDUE
      (RESIDUE OR RESIDUES)
30823 RECYCLE
1875 RECYCLES
32354 RECYCLE
      (RECYCLE OR RECYCLES)
405473 WASTE
196884 WASTES
455129 WASTE
      (WASTE OR WASTES)
198150 REMAINS

```

L33 1323788 RESIDUE OR RECYCLE OR WASTE OR REMAINS

=> s 133 and 17

L34 118649 L33 AND L7

=> s 134 and 122

L35 2957 L34 AND L22

=> 135 and 11

L35 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s 135 and 11

L36 12 L35 AND L1

=> d 136 1-12 ibib abs

L36 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:962966 CAPLUS

DOCUMENT NUMBER: 147:303010
 TITLE: Cylindrical apparatus for recovering waste
 wax liquid to produce candle
 INVENTOR(S): Li, Kaihao
 PATENT ASSIGNEE(S): Peop. Rep. China
 SOURCE: Shiyong Xinxing Zhuanli Shuomingshu, 5pp.
 CODEN: CNXXAR
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 2903070	Y	20070523	CN 2006-20089687	20060309
PRIORITY APPLN. INFO.:			CN 2006-20089687	20060309

AB The title cylindrical apparatus comprises: an upright cylindrical shell, a wooden piston plugged in the bottom mouth of the shell, a foundation, a candle support, at least two concentric rings, a spike, and a wick, wherein, the inner wall of the shell is coated with a lubricating oil layer. The apparatus can be used for recovering waste wax liquid to produce candle.

L36 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2006:710865 CAPLUS
 DOCUMENT NUMBER: 145:147857
 TITLE: Candle and candle wax
 containing metathesis and metathesis-like products
 INVENTOR(S): Murphy, Timothy A.; Tupy, Michael A.; Abraham, Timothy
 W.; Shafer, Andy
 PATENT ASSIGNEE(S): Cargill, Incorporated, USA
 SOURCE: PCT Int. Appl., 91 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2006076364	A2	20060720	WO 2006-US822	20060110
WO 2006076364	A3	20061109		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006205023	A1	20060720	AU 2006-205023	20060110
CA 2592786	A1	20060720	CA 2006-2592786	20060110
EP 1856208	A2	20071121	EP 2006-733666	20060110
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,			

Serial N 10/565361

IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
IN 2007CN03044 A 20071116 IN 2007-CN3044 20070709
PRIORITY APPLN. INFO.: US 2005-642600P P 20050110
US 2005-690122P P 20050613
WO 2006-US822 W 20060110

AB Waxes having m.p. 20-70°, useful for candles,
contain 10-40% metathesis products of esters of polyols and fatty acid
compns. containing ≥1 unsatd. fatty acid and ≥1 of polyol fatty
ester stock, paraffin wax, fatty acids, carnauba wax,
and beeswax.

L36 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:99588 CAPLUS

DOCUMENT NUMBER: 142:179255

TITLE: Method for production of raw materials for
candle production and a heat store material

INVENTOR(S): Tischendorf, Dieter

PATENT ASSIGNEE(S): Germany

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005010135	A1	20050203	WO 2004-EP8269	20040723
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1648987	A1	20060426	EP 2004-763445	20040723
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1829789	A	20060906	CN 2004-80021478	20040723
US 2006211875	A1	20060921	US 2006-565361	20060123
PRIORITY APPLN. INFO.:			DE 2003-10333862	A 20030724
			WO 2004-EP8269	W 20040723

AB A method for production of raw materials for candle production and a heat store material (waxes), whereby lipids are extracted, refined and/or hydrogenated from a lipid containing material, such as mixts. of food wastes, used cooking oils and fats, materials from food industry, and/or animal fats, comprises (a) washing and crushing, (b) isolating the lipids, and (c), optionally, subsequent esterification, refining, and/or hydrogenation (under pressure; using Ni- or Pt-catalysts). Preferably, after step a, the starting material is dehydrogenated and sterilized at 353-453 K. Mineral oils and fats and/or hydrocarbons are added to the mixture of lipid-containing organic materials of animal and vegetable origin. Before the lipids are reacted to triglycerides, free fatty acids are removed by extraction Finally,

perfumes and/or pigments are admixed.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:824014 CAPLUS

DOCUMENT NUMBER: 141:300581

TITLE: Microbial materials for degradation of oils and toxic chemicals

INVENTOR(S): Yum, Kyu-Jin; Park, Young-Jun

PATENT ASSIGNEE(S): S. Korea

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004085626	A1	20041007	WO 2004-KR671	20040325
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:				
BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1615994	A1	20060118	EP 2004-723427	20040325
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
CN 1764716	A	20060426	CN 2004-80007988	20040325
JP 2006517097	T	20060720	JP 2005-518457	20040325
US 2006051855	A1	20060309	US 2005-530653	20050407
PRIORITY APPLN. INFO.:			KR 2003-18913	A 20030326
			WO 2004-KR671	W 20040325

AB The present invention relates to a microbial material which can degrade and treat oils, such as gasoline, naphtha, kerosene or Bunker C oil, and toxic chems., such as BTEX (benzene, toluene, ethylbenzene and xylene), which are main oil ingredients. The microbial material includes a mixture comprising a microorganism and culture filtrate capable of degrading oil and toxic chems. being at least one selected from the group consisting of Trichosporon loubieri Y1-A of deposit Number KCTC 18079P, Trichosporon cutaneum, and white-rot fungi living upon the surface of wood, lipophilic powder being at least one selected from the group consisting of natural wax, synthetic wax, beeswax and waste candle, and a microbial nutrient. The microbial material can efficiently, rapidly degrade contaminants that are unreadyly degradable, by increasing a contact area with the microorganism capable of degrading the unreadyly degradable contaminants.

L36 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:345620 CAPLUS

DOCUMENT NUMBER: 132:323285
 TITLE: Production of candle from seeds of andiroba
 INVENTOR(S): Morais, Luiz Roberto Barbosa
 PATENT ASSIGNEE(S): Brasmazon Industria de Oleaginosas e Produtos da Amazonia Ltda, Brazil
 SOURCE: Braz. Pedido PI, 16 pp.
 CODEN: BPXXDX
 DOCUMENT TYPE: Patent
 LANGUAGE: Portuguese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 9706610	A	19990706	BR 1997-6610	19971118
PRIORITY APPLN. INFO.:			BR 1997-6610	19971118

AB The title process consists of (a) screening and cleaning the seeds of andiroba, (b) sterilization of the seeds, (c) treating with enzymes, (d) triturating the seeds, (e) heating, (f) pressing to sep. oil from the solid cake, (g) filtering and removing the oil, (h) mixing paraffins with the solid cake to form candles.

L36 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:141024 CAPLUS
 DOCUMENT NUMBER: 106:141024
 TITLE: Combustible material for burners and candles
 INVENTOR(S): Macho, Vendelin; Nedas, Jozef; Bomba, Miroslav; Vankova, Jindra; Bachrata, Helena
 PATENT ASSIGNEE(S): Czech.
 SOURCE: Czech., 5 pp.
 CODEN: CZXXA9
 DOCUMENT TYPE: Patent
 LANGUAGE: Slovak
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 229528	B1	19840618	CS 1982-6307	19820831
PRIORITY APPLN. INFO.:			CS 1982-6307	19820831

AB Several low-cost compns., containing paraffins, ceresin, stearins, and products or byproducts from production of polyalkenes, were formulated for the title use. Homogenization of paraffins 85, low-mol. products (from polyethylene production) 20, and polypropylene oil K-300 45 weight parts gave a material (chill point 51°) which left 0.8% residue after burning.

L36 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:8612 CAPLUS
 DOCUMENT NUMBER: 102:8612
 TITLE: Candle compositions
 INVENTOR(S): Schade, Siegfried; Demin, Peter; Thost, Axel; Matthaei, Michael
 PATENT ASSIGNEE(S): Ger. Dem. Rep.
 SOURCE: Ger. (East), 6 pp.
 CODEN: GEXXA8
 DOCUMENT TYPE: Patent
 LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 206789	A1	19840208	DD 1982-240254	19820528
DD 206789	B1	19860709		

PRIORITY APPLN. INFO.: DD 1982-240254 19820528

AB Mixts. of ceresin and by-products of polyethylene (I) [9002-88-4] or ethylene-vinyl acetate copolymer (II) [24937-78-8] synthesis (i.e., mixts. of paraffin oils, low- to high-mol.-weight polymers, and waxy substances) are added to paraffin compns. used for the manufacture of candles. The additives permit the manufacture of candles having good demolding properties and defect-free surfaces. Thus, 78 g hard paraffin containing 2 g I wax and 5 g stearin was mixed at 365-375 K with 10 g ceresin and 5 g by-products of I or II synthesis, cast in a silicone mold, cooled, and demolded to give a candle having a uniform, defect-free surface.

L36 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:482761 CAPLUS
DOCUMENT NUMBER: 95:82761
TITLE: Processing fatty acid distillation residues
INVENTOR(S): Timar, Jozsef; Kainrat, Mrs. Jozsef; Szego, Ferenc
PATENT ASSIGNEE(S): Hung.
SOURCE: Hung. Teljes, 13 pp.
CODEN: HUXXB
DOCUMENT TYPE: Patent
LANGUAGE: Hungarian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 2583	A1	19801227	HU 1979-SE1945	19790704
HU 177744	B	19811228		

PRIORITY APPLN. INFO.: HU 1979-SE1945 19790704

AB Fatty acid distillation residues are treated with 0.1-20.0% alkaline earth metal oxides or hydroxides and 0.1-15.0% basic dialkyl naphthalenesulfonates at 100-200° and combined with hydrocarbon, ester, and/or polyethylene waxes to prepare products which are useful as candles, for treating and polishing wood, leather, and metals, as anticorrosive coatings, etc. Thus, 1 kg fatty acid distillation residue was treated at 140° with 90 mL H₂O containing 105 g Ca(OH)₂, stirred at 195°, treated with 50 g dioctyl naphthalenesulfonic acid basic Ba salt [78247-40-2] in 50 g mineral oil, and stirred at 150° to give a waxy material which (400 g) was mixed with ceresin 25, petrolatum 25, and bitumen 100 g at 130° and diluted with 425 g white spirit and 25 g BuOCH₂CH₂OH to prepare a temporary, anticorrosive coating.

L36 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1972:437240 CAPLUS
DOCUMENT NUMBER: 77:37240
ORIGINAL REFERENCE NO.: 77:6169a, 6172a
TITLE: Solid and pasty fuel and luminous source compositions
INVENTOR(S): Bukosza, Istvan; Meszaros, Robert; Szemes, Laszlo
SOURCE: Hung. Halasztott, 13 pp.

CODEN: HGXXAX
 DOCUMENT TYPE: Patent
 LANGUAGE: Hungarian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 719		19720428	HU 1971-BU575	19711026

AB Various mixts. of combustible organic materials (C1-4 alcs., their formates and acetates, acetals, ketones, vegetable, fuel and waste oils, paraffin, petrolatum, waxes, etc.) and 10-25% inorg. fillers (kaolin, fuller's earth, aerosil, CaCO₃, MgO, Fe₂O₃, MnO₂, etc., sp. surface ≥ 50 m²/g) containing additives (coloring and flame-coloring agents, perfumes, metal powders) are described that give sootless and smokeless flares and are useful as fuels and light sources, e.g. for campers, as well as fire lighters, decorative (colored-flame) candles, sparklers, etc. Thus, a homogenized mixture of BuOH 40, glycerol 38, 0.5% methylene blue solution in EtOH 2, precipitated CaCO₃ 10, and SiO₂ (sp. surface >100 m²/g) 10 g was packed into a tube and used as a fuel to heat canned foods.

L36 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1964:454203 CAPLUS
 DOCUMENT NUMBER: 61:54203
 ORIGINAL REFERENCE NO.: 61:9344g-h,9345a-b
 TITLE: Telomerization of unsaturated hydrocarbons with alkylene glycol borates
 INVENTOR(S): Emrick, Donald D.; Darling, Samuel M.
 PATENT ASSIGNEE(S): Standard Oil Co.
 SOURCE: 12 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3104255		19630917	US 1961-116697	19610613

PRIORITY APPLN. INFO.: CA 19600616

AB α - and β -Alkylene glycol borates were used to telomerize α -olefins in the presence of the usual free-radical polymerization initiators. The ratio of glycol to boric acid residue may be 1:1, 2:2, or 3:2. Up to 3 of the H atoms of the ethylene glycol or up to 5 H atoms of the 1,3-propylene glycol may be substituted by C1-10 univalent hydrocarbon radicals, if the total number of C atoms in the glycol borate is .apprx.3-30. The telomers are terminated with a glycol borate residue. B contents were 0.01-5.5% and mol. wts. 200 to $>30,000$. The low-mol.-weight materials (200-750) containing 0.6-5.5% B are viscous oils or soft solids, soluble in C₆H₆, useful as lubricants for textiles, machinery, and engines, as lubricant and fuel additives to supply B, and as hydraulic fluids. The medium mol.-weight materials (1000-12,000) containing 0.03-0.6% B are waxes insol. in C₆H₆. They are useful in the formulation of polishes, candles, carbon paper, crayons, matches, and printing inks. The high-mol.-weight materials ($>12,000$) containing 0.01-0.06% B are tough, thermoplastic resins useful in coating compns., hot melts, rubber compounding, and cable and pipe

coatings. They may be used to coat regenerated cellulose film. E.g., a solution of bis(2-methyl-2,4-pentanediol) diborate (I) 428 and di-tert-Bu peroxide (II) 25 in C₆H₆ 382 g. was charged to an evacuated 1-gal. autoclave and the latter was flushed with N₂. C₂H₄ was charged to a pressure of 780 lb./in.² gage (psig) at 15°. The mixture was heated with agitation to 130° (2310 psig) during 1 hr. and maintained at 132-58° for 13 hrs. The yield was 928 g. of crude solids, of which 269 g. was a C₆H₆-insol. telomer containing 0.281% B and having a mol. weight

of

4360. The yield of C₆H₆-soluble, MeOH-insol. telomer was 294 g. and it had a mol. weight of 1435. C₂-12 α -olefins can be used and ≥ 2 α -olefins can be cotelomerized. Continuous processes are feasible. In another similar example, 110 g. crude solvent-free product was obtained from 45.2 g. I and 2.5 g. II upon reaction with C₂H₄ at 128-42°. The product was fractionated into 30.8 g. C₆H₆-insol. telomer containing 0.362% B, mol. weight 5320, a tough, elastic plastic. Evaporation of the C₆H₆ from the C₆H₆-soluble fraction, followed by H₂O extraction of unreacted I, gave 26.6 g. C₆H₆-soluble telomer, mol. weight 882, a soft solid.

L36 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1935:4760 CAPLUS
DOCUMENT NUMBER: 29:4760
ORIGINAL REFERENCE NO.: 29:592h-i,593a-c
TITLE: Improving hydrocarbon waxes and oils
PATENT ASSIGNEE(S): I. G. Farbenindustrie AG
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 413637		19340713	GB 1933-1217	19330113

AB Paraffin waxes and hydrocarbon lubricating oils and greases are improved by addition of a small proportion, e. g., 0.5-10%, of 1 or more highly polymerized vinyl compds. containing O, i. e., polymers of mol. weight about or above 1000, preferably 3000-10,000. The waxes become softer and are less liable to acquire fissures, being thus suitable for making candles. The lubricants have their pour points lowered and their viscosity indexes raised. The polymers may be formed in the wax, etc., or in other oils to be added thereto; other polymerizable substances, e. g., isoolefins, may be present; and the polymers may be hydrogenated or otherwise modified chemically. There may also be added to the oils or greases substances lowering the setting point, e. g., highly polymerized isobutylene, volatilized paraffin or other wax and condensed hydrocarbons obtained as described in Brit. 349,071 (C. A. 26, 2048); castor oil with or without mineral oils; dioleoyl ketone; methyl oleoyl ketone; glycol ricinoleate; hydrocarbons, e. g., C₁₀H₈, oil fractions and residues, paraffin wax. Vinyl polymers specified are those of vinyl esters of oleic, stearic and palmitic acids; vinyl carboxylic acids or esters, e. g., acrylic acid, octodecyl acrylate; vinyl ethers of unsatd. alcs. or mixed unsatd. and saturated alcs., e. g., Bu, octodecyl, oleoyl, cetyl and industrial alcs.; and vinyl ethyl, vinyl phenyl and vinyl cyclohexyl ethers. Among examples, the vinyl ether of oleoyl alc., obtained from sperm oil, is polymerized according to Brit. 378,544 (C. A. 27, 4109) by heating to 50° in presence of BF₃ or a dilute solution in di-Bu ether of the addition compound of BF₃ and di-Bu ether;

0.1, 0.3 or 1% is added to lubricating oil.

L36 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1924:19504 CAPLUS

DOCUMENT NUMBER: 18:19504

ORIGINAL REFERENCE NO.: 18:2608c-f

TITLE: Wool washing and its by-products

AUTHOR(S): Rindl, M.

SOURCE: South African Journal of Industries (1923), 6,

402-4,469-75,538-43,628-32

CODEN: SAJLA6; ISSN: 0370-825X

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C. A. 17, 3792. Wool grease is purified by washing, bleaching and deodorizing. Deodorizing depends on changing the chemical composition of the odoriferous substance. Bleaching agents are frequently deodorizers. The modern methods of separating the cholesterol and isocholesterol esters, which are of wax-like consistency, from the softer esters are described, as is also the use of lanolin in therapeutics. Less refining is necessary when wool fat is used as a constituent of paving material, a rubber protector, a source of illuminating gas, waterproofing material, leather dressing, lubricant or as soap and candle stock. Various patented methods for distillation processes are described, none of which appears entirely satisfactory. The CCl₄ process is commended except for the high cost of the solvent. The relative merits of solvent and emulsion processes for extracting grease from wool are compared. Several methods of carbonization are described. Under present trade conditions it does not appear profitable to ship scoured wool instead of wool in the grease with the object of saving in freight charges. The profitableness of potash recovery from wool washings depends largely on the cost of potash from competing sources. Thus in the U. S. nearly 500 tons of potash were recovered from wool washings during each of the years 1917 and 1918, but none during 1920. Average wool washings evaporated to a pasty mass

and

calcined in a reverberatory furnace gave a residue containing K₂CO₃ 78.5%, KCl 5.7, K₂SO₄ 2.8, Na₂CO₃ and Na₂SO₄ 4.6, insol. (mainly silicates and C) 5.0, organic matter 3.0. Improved method of extraction and separation of grease and potash from wool are now in the exptl. stage.

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
L2 140 S CANDLE WAX
L3 108 S CANDLE (4W) MATERIAL
L4 3048 S FOOD (4W) RESIDUE
L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6 0 S L4 AND L5
L7 1119609 S (FAT# OR OIL#)
L8 203 S COOKING (3W) RESIDUE
L9 49 S L8 AND L7
L10 0 S L9 AND L5
L11 272 S COOKING (3W) WASTE
L12 0 S L11 AND L5

L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1

=> s comminut?

L37 12263 COMMINUT?

=> s l37 and l4

L38 1 L37 AND L4

=> d l38 ibib abs

L38 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:461004 CAPLUS

DOCUMENT NUMBER: 125:140902

TITLE: Homogeneity of fruits and vegetables
 comminuted in a vertical cutter mixer

AUTHOR(S): Young, Susan J. V.; Parfitt, Charles H., Jr.; Newell,
 Richard F.; Spittler, Terry D.

CORPORATE SOURCE: U.S. Food and Drug Administration, Center Food Safety
 and Applied Nutrition, Washington, DC, 20204, USA

SOURCE: Journal of AOAC International (1996), 79(4), 976-980
 CODEN: JAINEE; ISSN: 1060-3271

PUBLISHER: AOAC International

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The homogeneity of comminuted composites of 20 lb samples of
 apples, cabbage, and green beans containing field-incurred residues of
 p,p'-methoxychlor was studied to determine whether a 5 min comminution
 in a 40 qt vertical cutter mixer produces a homogeneous composite and
 whether the size of test portions used accurately represents the
 composite. Duplicate test portions of 100, 50, 25, 10, 5, and 2 g taken
 from each of 6 sep. sections of the mixer were analyzed by standard pesticide
 residue methodol. for p,p'-methoxychlor. Comminution of fresh
 produce in a 40 qt vertical cutter mixer, according to instructions
 described in the U.S. Food and Drug Administration's Pesticide Anal.
 Manual, Volume I, section 203B, produces a homogeneous composite. No

significant differences were found in the data for the 3 crops taken from the 6 sections of the mixer. Test portion wts. of 100, 50, and 25 g produced equivalent results for all 3 crops. Statistically significant differences were observed for cabbage at 2, 5, and 10 g and for green beans at 2 g.

```
=> s ground (5w) food
    343376 GROUND
    9233 GROUND
    351748 GROUND
        (GROUND OR GROUNDS)
    402585 FOOD
    82112 FOODS
    425584 FOOD
        (FOOD OR FOODS)
L39      277 GROUND (5W) FOOD
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=> s l39 and l30
L40      6 L39 AND L30
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=> s l40 and l29
L41      0 L40 AND L29
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=> d his
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FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

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L1      5464 S CANDLE?
L2      140 S CANDLE WAX
L3      108 S CANDLE (4W) MATERIAL
L4      3048 S FOOD (4W) RESIDUE
L5      6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6      0 S L4 AND L5
L7      1119609 S (FAT# OR OIL#)
L8      203 S COOKING (3W) RESIDUE
L9      49 S L8 AND L7
L10     0 S L9 AND L5
L11     272 S COOKING (3W) WASTE
L12     0 S L11 AND L5
L13     0 S L12 AND L7
L14     7445 S FRYING
L15     4943 S L14 AND L7
L16     42 S L15 AND L5
L17     0 S L16 AND L1
L18     0 S L16 AND WAX
L19     0 S L16 AND L3
L20     25 S L7 AND L3
L21     0 S L20 AND L5
L22     105455 S WAX
L23     273 S L22 AND L5
L24     0 S L23 AND L14
L25     4943 S L14 AND L7
L26     195 S L25 AND RESIDUE
L27     0 S L26 AND L5
L28     2 S L1 AND L5
L29     54685 S DEHYDROGENAT?
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L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMUNIT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29

=> s 129 and 15

L42 3 L29 AND L5

=> d 142 1-3 ibib abs

L42 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:102409 CAPLUS

DOCUMENT NUMBER: 140:300486

TITLE: Impact of unusual fatty acid synthesis on futile
 cycling through β -oxidation and on gene
 expression in transgenic plants

AUTHOR(S): Moire, Laurence; Rezzonico, Enea; Goepfert, Simon;
 Poirier, Yves

CORPORATE SOURCE: Department de Biologie Moleculaire Vegetale,
 Universite de Lausanne, Lausanne, CH-1015, Switz.

SOURCE: Plant Physiology (2004), 134(1), 432-442

CODEN: PLPHAY; ISSN: 0032-0889

PUBLISHER: American Society of Plant Biologists

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Arabidopsis expressing the castor bean (*Ricinus communis*) oleate
 12-hydroxylase or the *Crepis palaestina* linoleate 12-epoxygenase in
 developing seeds typically accumulate low levels of ricinoleic acid and
 vernolic acid, resp. We have examined the presence of a futile cycle of
 fatty acid degradation in developing seeds using the synthesis of
 polyhydroxyalkanoate (PHA) from the intermediates of the peroxisomal
 β -oxidation cycle. Both the quantity and monomer composition of the PHA
 synthesized in transgenic plants expressing the 12-epoxygenase and
 12-hydroxylase in developing seeds revealed the presence of a futile cycle
 of degradation of the corresponding unusual fatty acids, indicating a
 limitation in their stable integration into lipids. The expression
 profile of nearly 200 genes involved in fatty acid biosynthesis and
 degradation has been analyzed through microarray. No significant changes in
 gene expression have been detected as a consequence of the activity of the
 12-epoxygenase or the 12-hydroxylase in developing siliques. Similar
 results have also been obtained for transgenic plants expressing the
Cuphea lanceolata caproyl-acyl carrier protein thioesterase and
 accumulating high amts. of caproic acid. Only in developing siliques of
 the tag1 mutant, deficient in the accumulation of triacylglycerols
 and shown to have a substantial futile cycling of fatty acids toward
 β -oxidation, have some changes in gene expression been detected, notably
 the induction of the isocitrate lyase gene. These results indicate that
 anal. of peroxisomal PHA is a better indicator of the flux of fatty acid
 through β -oxidation than the expression profile of genes involved in
 lipid metabolism

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:392180 CAPLUS

DOCUMENT NUMBER: 133:147948

TITLE: Inactivation of the peroxisomal multifunctional protein-2 in mice impedes the degradation of not only 2-methyl-branched fatty acids and bile acid intermediates but also of very long chain fatty acids

AUTHOR(S): Baes, Myriam; Huyghe, Steven; Carmeliet, Peter; Declercq, Peter E.; Collen, Desire; Mannaerts, Guy P.; Van Veldhoven, Paul P.

CORPORATE SOURCE: Laboratory of Clinical Chemistry, K. U. Leuven, Louvain, B 3000, Belg.

SOURCE: Journal of Biological Chemistry (2000), 275(21), 16329-16336

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB According to current views, peroxisomal β -oxidation is organized as two parallel pathways: the classical pathway that is responsible for the degradation of straight chain fatty acids and a more recently identified pathway that degrades branched chain fatty acids and bile acid intermediates. Multifunctional protein-2 (MFP-2), also called D-bifunctional protein, catalyzes the second (hydration) and third (dehydrogenation) reactions of the latter pathway. In order to further clarify the physiol. role of this enzyme in the degradation of fatty carboxylates, MFP-2 knockout mice were generated. MFP-2 deficiency caused a severe growth retardation during the first weeks of life, resulting in the premature death of one-third of the MFP-2^{-/-} mice. Furthermore, MFP-2-deficient mice accumulated VLCFA in brain and liver phospholipids, immature C27 bile acids in bile, and, after supplementation with phytol, pristanic and phytanic acid in liver triacylglycerols. These changes correlated with a severe impairment of peroxisomal β -oxidation of very long straight chain fatty acids (C24), 2-methyl-branched chain fatty acids, and the bile acid intermediate trihydroxycoprostanic acid in fibroblast cultures or liver homogenates derived from the MFP-2 knockout mice. In contrast, peroxisomal β -oxidation of long straight chain fatty acids (C16) was enhanced in liver tissue from MFP-2^{-/-} mice, due to the up-regulation of the enzymes of the classical peroxisomal β -oxidation pathway. The present data indicate that MFP-2 is not only essential for the degradation of 2-methyl-branched fatty acids and the bile acid intermediates di- and trihydroxycoprostanic acid but also for the breakdown of very long chain fatty acids.

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:569734 CAPLUS

DOCUMENT NUMBER: 117:169734

TITLE: Thermal oxidation of thin films of unsaturated triacylglycerols. II. Thermal oxidation of a thin film of trilinoleoylglycerol

AUTHOR(S): Takaoka, Kyo; Kobayashi, Koichi; Takasago, Masahisa; Taru, Yasunori; Nishiyama, Shusaku

CORPORATE SOURCE: Lab. Chem., Musashi Inst. Technol., Tokyo, 158, Japan
 SOURCE: Yukagaku (1992), 41(8), 636-42
 CODEN: YKGKAM; ISSN: 0513-398X
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

AB The thermal oxidation reactions of thin films (thickness 16-170 μm) of trilinoleoylglycerol (TLEG) were investigated by thermogravimetric anal. Upon thermal oxidation, the weight of TLEG increased in the temperature range of

25-170° in air and in oxygen (heating rate: 2°/min). Elemental anal. of these samples was carried out and their compns. were determined. At 90°, 1 mol of the hydroperoxide of TLEG (TLEGHPO) was formed for 5.6 mol of TLEG, and agreement between calculated and found values was within the usual limits of variation of elemental anal.; degradation reactions did not occur. At 104°, 1 mol of TLEGHPO was formed for 3.3 mol of TLEG. The dehydrogenation of TLEGHPO started at this temperature. At 130°, 1 mol of TLEGHPO was formed for 1.1 mol of TLEG. Slight degradation of TLEGHPO occurred at C-C and C-H bonds of TLEGHPO. Degradation of C-C and C-H bonds of TLEGHPO occurred at 155°. The relationship between the maximum increase in weight (% $\mu\text{g}/\text{cm}^2$) and film thickness of TLEG (μm) is given by equations. In the temperature range of thermal degradation (180°-600°), the relation between the layer thickness of thermal oxidative degradation (μm) and film thickness of TLEG (μm) is also given by equations.

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(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
 L2 140 S CANDLE WAX
 L3 108 S CANDLE (4W) MATERIAL
 L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5

L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMINUT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5

=> s extract
 47268 EXTRACT
 49975 EXTRACTS
 92692 EXTRACT
 (EXTRACT OR EXTRACTS)
 333041 EXT
 237460 EXTS
 508099 EXT
 (EXT OR EXTS)
 L43 540881 EXTRACT
 (EXTRACT OR EXT)

=> s 143 130
 MISSING OPERATOR L43 L30
 The search profile that was entered contains terms or
 nested terms that are not separated by a logical operator.

=> s 143 and 130
 L44 10010 L43 AND L30

=> s animal (3w) material
 1407708 ANIMAL
 475586 ANIMALS
 1756848 ANIMAL
 (ANIMAL OR ANIMALS)
 1624775 MATERIAL
 2162788 MATERIALS
 3250240 MATERIAL
 (MATERIAL OR MATERIALS)
 L45 2300 ANIMAL (3W) MATERIAL

=> s vegetable (3w) material
 98044 VEGETABLE
 31456 VEGETABLES
 113064 VEGETABLE
 (VEGETABLE OR VEGETABLES)
 1624775 MATERIAL
 2162788 MATERIALS
 3250240 MATERIAL
 (MATERIAL OR MATERIALS)
 L46 5821 VEGETABLE (3W) MATERIAL

=> s 144 and 145 and 146
L47 0 L44 AND L45 AND L46

=> s 145 and 144
L48 8 L45 AND L44

=> s 144 and 146
L49 8 L44 AND L46

=> d 148 1-8 ibib abs

L48 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:104587 CAPLUS
DOCUMENT NUMBER: 144:156901
TITLE: Bioresorbable material for filling bone defects
INVENTOR(S): Briest, Arne; Muecke, Ingo
PATENT ASSIGNEE(S): Ossacur AG, Germany
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006010547	A2	20060202	WO 2005-EP7908	20050720
WO 2006010547	A3	20060406		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102004036881 A1 20060216 DE 2004-102004036881 20040722
PRIORITY APPLN. INFO.: DE 2004-102004036881A 20040722

AB Disclosed is a bioresorbable material for filling bone defects. Said bioresorbable material comprises a demineralized xenogeneic bone material and at least one additive, active substance, and/or ext. Advantageously, the additive and/or the active substance represent/s a biol. active material and/or the ext. is a biol. ext.

L48 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:221911 CAPLUS
DOCUMENT NUMBER: 138:251130
TITLE: Method and system for classifying a scenario
INVENTOR(S): Chaplen, Frank W. R.; Gerwick, William H.; Jovanovic, Goran; Kolodziej, Wojtek J.; Liburdy, Jim; McFadden, Phil; Paul, Brian K.; Plant, Thomas K.; Trempey, Janine E.; Willard, Corwin; Pacut, Andrzej; Upson, Rosalyn H.; Roussel, Nicolas
PATENT ASSIGNEE(S): Oregon State University, USA

SOURCE: PCT Int. Appl., 193 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003023366	A2	20030320	WO 2002-US29085	20020912
WO 2003023366	A3	20031127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002336504	A1	20030324	AU 2002-336504	20020912
US 2005074834	A1	20050407	US 2004-801389	20040312
PRIORITY APPLN. INFO.:			US 2001-322004P	P 20010912
			WO 2002-US29085	W 20020912

AB Living cells can be used to identify or quantify bioactive conditions, including without limitation, chems., biol. pathogens, and environmental conditions, such as pH, in samples based on changes in, for example, cell color, morphol. and/or physiol. Such changes can be directly detected or detected with the aid of instrumentation. One embodiment of the method comprises exposing a system to a bioactive condition, such as a chemical agent, a biol. pathogen, an environmental condition, such as pH, etc., and combinations of such conditions. The system then exhibits a response to the bioactive condition. The response of the system, or a portion thereof, to the bioactive condition is then represented, such as by digital images. The method then involves attempting to classify a scenario by database comparison. Classification can be in terms of numeric or non-numerical classifiers. Typically, the system comprises living cells. Living cells useful for practicing the method experience a detectable change in response to an interaction with a bioactive condition. A likely living cell for use with the method and apparatus of the present invention is a chromatophore. The present method has a number of uses, including classifying unknown drug candidates, classifying unknown toxins, classifying chemical warfare agents, etc. The method can be implemented using a computer program encoding the method. Moreover, a computer-readable medium is described on which is stored a computer program having instructions for executing the method. A cytosensor apparatus also is described. Betta chromatophores were isolated and used in cytosensors to detect biol. toxins in food and water, a calcium ion channel in erythrophores, and other agents. A two-cell cytosensor containing chromatophores and a small inoculum of a selected microbial cell was used to test potential antibiotics.

L48 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:782506 CAPLUS
 DOCUMENT NUMBER: 137:351952
 TITLE: Carbohydrate-flavonoid-nutrient biologically active supplement for food use.

INVENTOR(S): Nekrasova, V. B.; Nikitina, T. V.; Kurnygina, V. T.;
Bespalov, V. G.
PATENT ASSIGNEE(S): Obshchestvo s Ogranichennoi Otvetstvennost'yu
"Fitolon-Nauka", Russia
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2181560	C2	20020427	RU 2000-107907	20000403
PRIORITY APPLN. INFO.:			RU 2000-107907	20000403

AB The biol. active supplement comprises a carbohydrate-flavonoid ext
. prepared from pine and/or spruce coniferous needles. Exts.
have, %: carbohydrates ≤ 85 , flavonoids ≤ 6.0 , amino acids and
proteins ≤ 10 , mineral substances, ≤ 15 , organic acids
 ≤ 15 , lignans ≤ 50 , tannins ≤ 15 , and vitamins of group
B ≤ 50 mg% and vitamin C ≤ 300 mg%. The biol. active
supplement can contain addnl. vitamins and/or polyunsatd. fatty acids,
and/or sterols, and/or saponins, and/or lipids, from plant or
animal raw materials, the raw materials exhibiting
optimal balance of components such as adaptogens and detoxicants for
disease control.

L48 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:559056 CAPLUS

DOCUMENT NUMBER: 138:260051

TITLE: Final report on the safety assessment of human
placental protein, hydrolyzed human placental protein,
human placental enzymes, human placental
lipids, human umbilical extract,
placental protein, hydrolyzed placental protein,
placental enzymes, placental lipids, and
umbilical extract

AUTHOR(S): Nair, Bindu; Elmore, Amy R.; Anderson, F. Alan
CORPORATE SOURCE: Cosmetic Ingredient Review, Washington, DC, 20036, USA
SOURCE: International Journal of Toxicology (2002), 21(Suppl.
1), 81-91

CODEN: IJTOFN; ISSN: 1091-5818

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Various proteins, lipids, or other exts. from human or
other animal placentas are described as cosmetic ingredients. Human
Placental Protein comprises protein derived from human placentas.
Placental Protein is derived from animal placentas. Similarly, Human
Placental Lipids and Placental Lipids are the lipid
fractions from the same source materials. Hydrolyzed Human Placental
Protein and Hydrolyzed Placental Protein are produced from the resp.
protein exts. by acid, enzyme, or other hydrolysis methods.
Human Placental Enzymes and Placental Enzymes are enzymes obtained by aqueous
extraction of human or other animal placental material.
Human Umbilical Ext. and Umbilical Ext. are
unspecified exts. of material from human or other animal
umbilical cords. Different materials called Human Placental Exts

. and Placental Exts., assumed to contain estrogenic hormones or other biol. active substances, are not recognized as cosmetic ingredients, even though the use of these ingredients in cosmetics have been reported to the Food and Drug Administration (FDA). Human-derived ingredients are prohibited from use under the provisions of the European Union cosmetics directive based on concerns about transmission of human spongiform encephalopathies and viral diseases, for example, human immunodeficiency virus (HIV). Umbilical Ext. has precedent for unrestricted use in Japan, except for certain products. Most of these ingredients are described as hair-conditioning agents and miscellaneous skin-conditioning agents, although the umbilical exts. function as biol. additives in cosmetics. Of the human-derived ingredients, only Human Placental Protein is currently reported to be used. Animal-derived placental proteins, hydrolyzed proteins, lipids, and enzymes were all currently reported to be used. No current uses of the umbilical exts. were reported. Most of the available data relates to placental derivs. that appear to have estrogenic or other biol. activity. The one clin. study that appears to utilize proteinaceous material only reported no irritant reaction. Clearly, the available data are insufficient to support safety of these ingredients in cosmetics. The addnl. data needed include (1) skin sensitization at concentration of use; (2) gross pathol. and histopathol. in skin and other major organ systems associated with repeated exposures, and dermal reproductive and developmental toxicity data; (3) photosensitization; (4) one genotoxicity assay in a mammalian system; if pos., then a 2-yr dermal carcinogenicity study using National Toxicol. Program (NTP) methods may be needed; (5) ocular toxicity, if available. Any studies should be done on all ingredients unless chemical anal. data show similarity among ingredients. Because there is confusion and concern about the use of substances with estrogenic or other biol. activity in cosmetic formulations, it was concluded that none of these ingredients used in cosmetics should deliver any metabolic/endocrine activity. In addition, any current use of these ingredients should be free of detectable pathogenic viruses or infectious agents.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L48 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:278070 CAPLUS

DOCUMENT NUMBER: 132:305471

TITLE: Method of extracting lipids from marine and aquatic animal tissues

INVENTOR(S): Beaudoin, Adrien; Martin, Genevieve

PATENT ASSIGNEE(S): Universite de Sherbrooke, Can.

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000023546	A1	20000427	WO 1999-CA987	19991021
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,			

Serial N 10/565361

SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2251265	A1	20000421	CA 1998-2251265	19981021
CA 2346979	A1	20000427	CA 1999-2346979	19991021
AU 9964552	A	20000508	AU 1999-64552	19991021
AU 765464	B2	20030918		
BR 9914699	A	20010710	BR 1999-14699	19991021
EP 1123368	A1	20010816	EP 1999-952180	19991021

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

CN 1324394	A	20011128	CN 1999-812417	19991021
JP 2002527604	T	20020827	JP 2000-577261	19991021
RU 2236441	C2	20040920	RU 2001-113503	19991021
IN 2001MN00408	A	20050909	IN 2001-MN408	20010417
NO 2001001915	A	20010621	NO 2001-1915	20010418
NO 321481	B1	20060515		
MX 2001PA03955	A	20010622	MX 2001-PA3955	20010420
ZA 2001003235	A	20020620	ZA 2001-3235	20010420
US 6800299	B1	20041005	US 2001-830146	20010725
IN 2005MN00323	A	20050923	IN 2005-MN323	20050425

PRIORITY APPLN. INFO.:

CA 1998-2251265	A	19981021
WO 1999-CA987	W	19991021
IN 2001-MN408	A3	20010417

AB Provided herein is a method for extracting lipid fractions from marine and aquatic animal material by acetone extraction. The resulting non-soluble and particulate fraction is preferably subjected to an addnl. solvent extraction with an alc., preferably ethanol, isopropanol or t-butanol or an ester of acetic acid, preferably Et acetate to achieve extraction of the remaining soluble lipid fraction from the marine and aquatic animal material. The remaining non-soluble particulate contents is also recovered since it is enriched in proteins and contains a useful amount of active enzymes. Also provided herein is a krill ext.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L48 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:52449 CAPLUS

DOCUMENT NUMBER: 108:52449

TITLE: Supercritical fluid extraction of animal
-derived materials

INVENTOR(S): Kamarei, Ahmad Reza

PATENT ASSIGNEE(S): Angio-Medical Corp., USA

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8702697	A1	19870507	WO 1986-US2357	19861029
W: AU, DK, FI, HU, JP, KR, NO				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4749522	A	19880607	US 1985-793622	19851031

AU 8767741	A	19870519	AU 1987-67741	19861029
AU 602326	B2	19901011		
EP 243494	A1	19871104	EP 1987-900367	19861029
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
HU 44281	A2	19880229	HU 1987-445	19861029
JP 63501851	T	19880728	JP 1987-500166	19861029
ZA 8608321	A	19870624	ZA 1986-8321	19861031
ES 2002056	A6	19880701	ES 1986-2850	19861031
IL 80461	A	19900610	IL 1986-80461	19861031
CA 1270623	A1	19900626	CA 1986-521925	19861031
NO 8702687	A	19870626	NO 1987-2687	19870626
DK 8703338	A	19870629	DK 1987-3338	19870629
FI 8702868	A	19870629	FI 1987-2868	19870629

PRIORITY APPLN. INFO.:

US 1985-793622	A	19851031
WO 1986-US2357	A	19861029

AB Supercrit. fluids (SCF) are found to be useful in extracting desired materials from animal tissues, cells, and organs. By varying the choice of SCF, exptl. conditions, and animal source material, one may obtain lipids, proteins, nucleotides, saccharides, and other desirable components or remove undesirable components. Six samples were chosen for anal.: homogenates of porcine adipose tissue, porcine omentum and bovine omentum, and chloroform-methanol fraction exts. of each of these were prepared by addition of distilled H₂O in twice the volume of tissue, centrifuge homogenization, overnight freeze-drying, addition of 4 times the volume of phosphate-buffered saline solution, with addnl. homogenization and centrifuging. A lipid cake was produced which was then recovered and extracted with 10 times the volume of chloroform/methanol solvent (2:1, volume/volume). Centrifugation and evaporation of the solvent followed, with recovery of the filtered, viscous supernatant. The apparatus for this method was also described.

L48 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:191144 CAPLUS

DOCUMENT NUMBER: 102:191144

TITLE: Isolation of sphingomyelin from animal raw materials

INVENTOR(S): Kostetskii, E. Ya.; Nedashkovskaya, E. P.; Zilbers, J.

PATENT ASSIGNEE(S): Far Eastern State University, USSR; Institute of Sea Biology, Vladivostok; All-Union Scientific-Research Institute of Applied Biochemistry

SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1985, (1), 96. CODEN: URXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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SU 1133275	A1	19850107	SU 1983-3629497	19830726
PRIORITY APPLN. INFO.:			SU 1983-3629497	19830726

AB Sphingomyelin is isolated by extraction of lipids with a CHCl₃-MeOH mixture, alkaline hydrolysis of a lipid ext., and purification of sphingomyelin in a column with silica gel. Sphingomyelin is obtained by extracting lipids with CHCl₃-MeOH (1:1) with addition of 15-25% by volume H₂O (based on the weight of the mixture). The resulting lipid ext. is processed by acid hydrolysis with dilute HCl and by alkaline hydrolysis with

dilute alkaline solution with subsequent purification of sphingomyelin by passing it through one silica gel column by eluting the impurities with CHCl₃-MeOH (4-5:5-6) and sphingomyelin with CHCl₃-MeOH (2:8).

L48 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1983:95650 CAPLUS
 DOCUMENT NUMBER: 98:95650
 TITLE: Eicosapentaenoic acid
 INVENTOR(S): Vas'kovskii, V. E.; Romashina, N. A.
 PATENT ASSIGNEE(S): Institute of Marine Biology, Vladivostok, USSR
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1982, (42), 16-17.
 CODEN: URXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 973128	A1	19821115	SU 1981-3295422	19810311
PRIORITY APPLN. INFO.:			SU 1981-3295422	19810311

AB eicosapentaenoic acid (I) [32839-30-8] is prepared by extracting lipids from animal raw material with CHCl₃-MeOH solvents, the lipids saponified with a NaOMe solution in MeOH, esterified with excess HCl in MeOH, the Me esters extracted with hexane and purified by column-chromatog. on silica gel with subsequent elution with an organic solvent. The Me esters are separated by column chromatog. with elution of I. Strongylocentrotus intermedius Gonads are used as a source of I with elution of I successively with mixts. of organic solvents with decreasing polarity, 1st with hexane, then with a 96:4 mixture of hexane-Et₂O and then with a 90:4:0.5-80:20:2.5 mixture of hexane-Et₂O-HOAc.

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(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
 L2 140 S CANDLE WAX
 L3 108 S CANDLE (4W) MATERIAL
 L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX

L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMUNIT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5
 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46

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L49 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2007:409592 CAPLUS
 DOCUMENT NUMBER: 146:378704
 TITLE: Water-dispersible composition and method for preparing same
 INVENTOR(S): Wang, Junkuan; Bertholet, Raymond; Ducret, Pierre
 PATENT ASSIGNEE(S): Nestec S.A., Switz.
 SOURCE: PCT Int. Appl., 18pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007039452	A1	20070412	WO 2006-EP66511	20060919
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

EP 2005-20453

A 20050920

AB A water-dispersible composition (preferably a powder) consists of water-extractible bioactive components (e.g., carotenoids or flavonoids) of fruit or vegetable or plant origin obtainable by a process which comprises: (a) subjecting a selected fruit or vegetable or plant material to homogenization in weak alkaline conditions and at moderate temperature; (b) separating the liquid ext. from the homogenized mass and subsequently bringing it to neutrality; and (c) concentrating or drying (preferably freeze drying) the neutralized liquid ext. The composition can be used as primary composition in the preparation of, e.g., a food product for

oral administration, a food supplement, a pet food product, a pet food supplement, a cosmetic preparation, or a pharmaceutical preparation

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1216213 CAPLUS

DOCUMENT NUMBER: 145:470369

TITLE: Method for manufacturing dry microencapsulated drink (variants)

INVENTOR(S): Avstrieviskikh, A. N.; Vekovtsev, A. A.

PATENT ASSIGNEE(S): OOO "Artlaif", Russia

SOURCE: Russ., 8pp.

CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2287305	C2	20061120	RU 2004-111752	20040419

PRIORITY APPLN. INFO.:

RU 2004-111752

20040419

AB Variant methods for the manufacture of dry powder beverage concs. from plant raw materials are described. In the first variant, the plant ext . is mixed with auxiliary substance (gum arabic) and a dairy product (dry whole milk); sucrose and water are added during mixing to obtain emulsion with 1-20 weight parts of gum arabic, 5-50 weight parts of sucrose, 0.5-5.0 weight

parts of dry plant ext., 35.0-70.0 weight parts of dry whole milk, and 97.0-408.3 weight parts of water. The mixture is then spray-dried at $\leq 70^{\circ}\text{C}$ to develop microcapsules coated with gum arabic. In the second variant, the mixed plant aqueous ext. with 10-30% dry matter is mixed with auxiliary substances (gum arabic) and a dairy product (dry whole milk); sucrose and water are added to obtain emulsion with 1-20 weight parts of gum arabic, 5-50 weight parts of sucrose, 95.1-388.3 weight

parts

of aqueous plant ext., 35.0-70.0 weight parts of dry whole milk, and 95.1-388.0 weight parts of water. The mixture is then spray-dried as above. The mixed plant ext. is obtained from herbs, roots, flowers, and/or fruits and contains at least 2 components. The microcapsules have a natural polymer (gum arabic) membrane coating protecting lipids

and biol. active substances.

L49 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1154002 CAPLUS

DOCUMENT NUMBER: 143:405038

TITLE: Complex processing of wild rose fruits for vitamin-containing nutritional supplements.

INVENTOR(S): Rubchevskaya, L. P.; Shanina, E. V.

PATENT ASSIGNEE(S): Gosudarstvennoe Obrazovatel'noe Uchrezhdenie Vysshego Professional'nogo Obrazovaniya "Sibirskii Gosudarstvennyi Tekhnologicheskii Universitet", Russia

SOURCE: Russ., 5 pp.
CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2263138	C1	20051027	RU 2004-100748	20040108
PRIORITY APPLN. INFO.:			RU 2004-100748	20040108

AB The invention relates to the complex processing of vitamin-containing vegetable raw materials and can be used in preparing vitamin-containing complexes and nutritional supplements. Complex treatment involves extraction of wild rose fruits with carbon dioxide and preparing a lipid-carotenoid complex and residue that is extracted with water, yielding an aqueous ext. containing a vitamin-flavonoid complex and residue. Before extraction the raw material is milled to particle size 0.5 mm. Extraction of raw material with carbon dioxide is carried out under pressure 6-7 MPa and temperature 20-22°C for 3-4 h and extraction with water is carried out in the ratio residue:solvent (water) = 1:10 for 3 h. Then dried residue is extracted with 40-96% aqueous EtOH at 40-100°C for 1-3 h and an aqueous-alc. ext. containing biol. active substances and residue are isolated. The residue is dried and a mineral complex is obtained.

L49 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:78248 CAPLUS

DOCUMENT NUMBER: 136:104204

TITLE: Method of vegetable oil production by extraction with ethanol

INVENTOR(S): Kislukhina, O. V.; Tyrsin, Yu. A.; Migacheva, O. V.

PATENT ASSIGNEE(S): Moskovskii Gosudarstvennyi Universitet Pishchevykh Proizvodstv, Russia

SOURCE: Russ., No pp. given
CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2149892	C1	20000527	RU 1999-103749	19990225
PRIORITY APPLN. INFO.:			RU 1999-103749	19990225

AB Vegetable oil is produced by ethanol extraction from mixture of several species of vegetable raw materials. The mixture contains, %:

lipid, 15-30; tocopherol, 0.4-1.2; carotinoid, 0.005-0.05. Oil separation is conducted at water concentration in ext. equal 28-32%. The method allows for production of higher quality of oil for pharmaceutical applications.

L49 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:650071 CAPLUS

DOCUMENT NUMBER: 132:241786

TITLE: Lipid composition of seven APTT reagents in relation to heparin sensitivity

AUTHOR(S): Kitchen, S.; Cartwright, I.; Woods, T. A. L.; Jennings, I.; Preston, F. E.

CORPORATE SOURCE: Sheffield Thrombosis and Haemostasis Centre, Royal Hallamshire Hospital, Sheffield, S10 2JF, UK

SOURCE: British Journal of Haematology (1999), 106(3), 801-808
CODEN: BJHEAL; ISSN: 0007-1048

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The phospholipid content of different activated partial thromboplastin time (APTT) reagents was determined and compared to heparin sensitivity. The seven reagents included were those most widely used amongst participants of the U.K. National External Quality Assessment Scheme (NEQAS) at the time of study. Heparin sensitivity was assessed using the APTT ratios obtained by more than 300 NEQAS participants on five plasmas prepared from patients receiving unfractionated heparin. The concns. of three neutral lipids and six phospholipids present in the seven APTT reagents were determined by high-performance thin-layer chromatog. (HPTLC) and densitometry. Both the concns. and the relative percentages of individual phospholipid components varied markedly between reagents. The total phospholipid concentration included a 12-fold range from 16 to 205 µg/mL. Phosphatidylserine (PS) was completely lacking from one reagent prepared from vegetable material and ranged from 3 to 22 µg/mL in the other six reagents containing exts. from animal tissue. The concentration of phosphatidylcholine ranged from 3 to 109 µg/mL. There was no demonstrable relationship between the concentration of any individual lipid components and heparin sensitivity. However, the relative percentage phospholipid composition was important since a lower % of PS or phosphatidylinositol (PI) correlated with increasing heparin sensitivity.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:399988 CAPLUS

DOCUMENT NUMBER: 127:19910

TITLE: Manufacture of polar lipid-rich, fractionated oils, and their use

INVENTOR(S): Hersloef, Bengt; Tingvall, Per; Kroon, Carl-Gunnar

PATENT ASSIGNEE(S): Scotia Lipidteknik AB, Swed.

SOURCE: Swed., 19 pp.
CODEN: SSXXAY

DOCUMENT TYPE: Patent

LANGUAGE: Swedish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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SE 504664	C2	19970324	SE 1995-3296	19950922
SE 9503296	A	19970323		
CA 2232541	A1	19970327	CA 1996-2232541	19960913
CA 2232541	C	20050510		
WO 9711141	A1	19970327	WO 1996-SE1146	19960913
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
AU 9671019	A	19970409	AU 1996-71019	19960913
AU 706577	B2	19990617		
JP 11512477	T	19991026	JP 1997-512633	19960913
JP 3782457	B2	20060607		
EP 1027413	A1	20000816	EP 1996-932113	19960913
EP 1027413	B1	20031119		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
AT 254655	T	20031215	AT 1996-932113	19960913
PT 1027413	T	20040430	PT 1996-932113	19960913
ES 2211974	T3	20040716	ES 1996-932113	19960913
US 6355693	B1	20020312	US 1998-29932	19980309
PRIORITY APPLN. INFO.:			SE 1995-3296	A 19950922
			WO 1996-SE1146	W 19960913

AB The process comprise extracting a vegetable material with a nonpolar solvent and evaporating the solvent to obtain a raw ext. containing nonpolar and polar lipids, mixing the ext. with an alc. to form a 2-phase system, and evaporating the alc. from the alc. phase to obtain the polar lipid-rich fraction. The raw ext. is obtained from cereals and grains, especially oats. The oils are used in food, pharmaceuticals, cosmetics, and products for oral, enteral, parenteral, topical or other form of administration. Extraction of oats gave a composition containing polar lipids 40 and oil 60, the polar lipids contained glycolipids 80.7, phospholipids 14.5, and other polar lipids 4.8, and the glycolipids contained DGDG (digalactosediacylglycerol structure) 76.3 and other glycolipids 4.4 weight%.

L49 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:555286 CAPLUS
DOCUMENT NUMBER: 115:155286
TITLE: Extraction of constituents of vegetable material with selective solvents
INVENTOR(S): Baccou, Jean Claude; Faugeras, Pierre; Ros, Pierre; Sauvaire, Yves
PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.; Universite des Sciences et Techniques du Languedoc
SOURCE: Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 441672	A1	19910814	EP 1991-400172	19910125
R: BE, CH, DE, ES, GB, IT, LI, NL				

Serial N 10/565361

FR 2657539 A1 19910802 FR 1990-983 19900129
FR 2657539 B1 19920403

PRIORITY APPLN. INFO.: FR 1990-983 A 19900129

AB Vegetable materials are subjected to extraction using selective solvents of increasing polarity. The method is especially suitable for the removal of undesired components from flours and grains. Powdered lupine grains are pelleted with Na CMC and the pellets are extracted successively with hexane, 70% EtOH and water (pH7). The 3 solvents ext. lipids, bitter alkaloids and proteins, especially The products are lupine oil and lysine protein cake, free of bitter alkaloids.

L49 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1970:87126 CAPLUS

DOCUMENT NUMBER: 72:87126

ORIGINAL REFERENCE NO.: 72:15823a,15826a

TITLE: Phytochemical analysis of Clinopodium vulgare

AUTHOR(S): Kostka, Barbara

CORPORATE SOURCE: Akad. Med., Lodz, Pol.

SOURCE: Acta Poloniae Pharmaceutica (1969), 26(4), 387

CODEN: APPHAX; ISSN: 0001-6837

DOCUMENT TYPE: Journal

LANGUAGE: Polish

AB Ligroine extraction of Clinopodium vulgare followed by alkaline hydrolysis of the

lipid fraction and subsequent chromatog. on Al2O3 allowed the isolation of a hydrocarbon fraction m. 63-5° and a mixture of aliphatic alcs. The Me2CO-soluble components were separated into a neutral (phytosterols and carotenoids) and an acid fraction; in addition, a triterpene m. 247-51° was isolated. The acid fraction as well as the acids obtained on hydrolyzing the lipids were analyzed by gas chromatog. Eight fatty acids were identified. The alc. ext. revealed the presence of flavonoids, phenolic acids, tannins or other polyphenols (12.7%), and saponins. The hemolytic index was 420 for the vegetable material and 3445 for the crude isolated saponin. Hydrolysis of the saponin revealed (paper chromatog.) galactose, fucose, arabinose, and rhamnose and a triterpene aglucon.

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
L2 140 S CANDLE WAX
L3 108 S CANDLE (4W) MATERIAL
L4 3048 S FOOD (4W) RESIDUE
L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6 0 S L4 AND L5
L7 1119609 S (FAT# OR OIL#)
L8 203 S COOKING (3W) RESIDUE
L9 49 S L8 AND L7
L10 0 S L9 AND L5
L11 272 S COOKING (3W) WASTE
L12 0 S L11 AND L5
L13 0 S L12 AND L7
L14 7445 S FRYING
L15 4943 S L14 AND L7

L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMINUT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5
 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46

=> s hydrogenate?

L50 134369 HYDROGENATE?

=> s 15 and 17

L51 2691 L5 AND L7

=> s 150 and 151

L52 107 L50 AND L51

=> s 152 and 122

L53 1 L52 AND L22

=> d 153 ibib abs

L53 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:758061 CAPLUS

DOCUMENT NUMBER: 123:168118

TITLE: Lipid composition of ten edible seed species from North Vietnam

AUTHOR(S): Imbs, A. B.; Pham, Long Quoc

CORPORATE SOURCE: Institute Marine Biology, Far East Branch Russian Academy Sciences, Vladivostok, 690041, Russia

SOURCE: Journal of the American Oil Chemists' Society (1995),

72(8), 957-61

CODEN: JAOCA7; ISSN: 0003-021X

PUBLISHER:

AOCS Press

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The lipid composition and oil content of ten edible species from North Vietnam (*Cassia tora*, *Ipomoea aquatica*, *Raphanus sativus*, *Citrullus lanatus*, *Cucumis melo*, *Cucurbita pepo*, *Luffa cylindrica*, *Phaseolus vulgaris*, *Vigna aurea*, *Sesamum orientale*) have been investigated. The contents of hydrocarbon, triacylglycerol, free fatty acid, sterol, di- and monoglycerol, and polar lipid fractions have been determined with a thin-layer chromatog. (TLC)/flame-ionization detection analyzer. Mol. species of hydrogenated triacylglycerols and the fatty acid composition of total lipids also have been analyzed by capillary gas-liquid chromatog. The quantities of major phospholipid classes of four seed species (*C. tora*, *I. aquatica*, *R. sativus*, *V. aurea*) have been determined by two-dimensional TLC and the spectrophotometrical phosphorus anal. The fatty acid compns. of nonpolar and polar lipid fractions of these four species also have been analyzed.

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
 L2 140 S CANDLE WAX
 L3 108 S CANDLE (4W) MATERIAL
 L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5

L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMUNUT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5
 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46
 L50 134369 S HYDROGENATE?
 L51 2691 S L5 AND L7
 L52 107 S L50 AND L51
 L53 1 S L52 AND L22

=> s 17 and cooking
 53891 COOKING
 79 COOKINGS
 53910 COOKING
 (COOKING OR COOKINGS)
 L54 10641 L7 AND COOKING

=> s 154 and 150
 L55 499 L54 AND L50

=> 155 and 15
 L55 IS NOT A RECOGNIZED COMMAND
 The previous command name entered was not recognized by the system.
 For a list of commands available to you in the current file, enter
 "HELP COMMANDS" at an arrow prompt (=>).

=> s 155 and 15
 L56 4 L55 AND L5

=> d 156 1-4 ibib abs

L56 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2006:336573 CAPLUS
 DOCUMENT NUMBER: 145:61726
 TITLE: Utilization of high-oleic rapeseed oil for
 deep-fat frying of french fries compared to
 other commonly used edible oils
 AUTHOR(S): Matthaeus, Bertrand
 CORPORATE SOURCE: Federal Research Center for Food and Nutrition,
 Institute for Lipid Research, Muenster, Germany
 SOURCE: European Journal of Lipid Science and Technology
 (2006), 108(3), 200-211
 CODEN: EJLTFM; ISSN: 1438-7697
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Changes in chemical, phys. and sensory parameters of high-oleic rapeseed oil (HORO) (NATREON) during 72 h of deep-fat frying of potatoes were compared with those of commonly used frying oils, palm olein (PO), high-oleic sunflower oil (HOSO) and partially hydrogenated rapeseed oil (PHRO). In addition to the sensory evaluation of the oils and the potatoes, the content of polar compds., oligomer triacylglycerols and free fatty acids, the oxidative stability by Rancimat, the smoke point and the anisidine value were determined. French fries obtained with HORO, PO and HOSO were still suitable for human consumption after 66 h of deep-fat frying, while French fries fried in PHRO were inedible after 30 h. During the frying period, none of the oils exceeded the limit for the amount of polar compds., oligomer triacylglycerols and free fatty acids recommended by the German Society of Fat Science (DGF) as criteria for rejection of used frying oils. After 72 h, the smoke point of all oils was below 150 °C, and the amount of tocopherols was reduced to 5 mg/100 g for PHRO and 15 mg/100 g for HORO and HOSO. Remarkable was the decrease of the oxidative stability of HOSO measured by Rancimat. During frying, the oxidative stability of this oil was reduced from 32 h for the fresh oil to below 1 h after 72 h of frying. Only HORO showed still an oxidative stability of more than 2 h. From the results, it can be concluded that the use of HORO for deep-fat frying is comparable to other commonly used oils.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L56 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:864985 CAPLUS

DOCUMENT NUMBER: 144:87102

TITLE: Frying oil deterioration - assessment of frying trials

AUTHOR(S): Pantzaris, Theophanis P.

CORPORATE SOURCE: London, E11 1NG, UK

SOURCE: Lipid Technology (2005), 17(7), 151-155

CODEN: LITEEI; ISSN: 0956-666X

PUBLISHER: PJ Barnes & Associates

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Assessing the performance of frying oils is necessary for cost-effective food production and for the development of better frying oils. But the current methods of assessment involve too many tests, a large volume of results and uncertain, subjective, interpretation of them. Here, we are introducing a simple but math. correct method, which involves using only two tests, namely total polar compds. (TPC) and polymeric triacylglycerols (PTG), as recommended by the German Society for Fat Science (DGF), and calculating the oils' frying life from easy linear equations. This method greatly reduces the effort required and gives precise, objective, numerical answers. It would also be of benefit to industry by enabling the estimation of TPC and PTG from simple time measurements.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L56 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:136484 CAPLUS

DOCUMENT NUMBER: 135:32938

TITLE: Correlation of quality of frying oil and

oil extracted from potato fritters fried in liquid and partially hydrogenated rapeseed oils

AUTHOR(S): Hazuka, Zdzislawa; Pawlowicz, Roman; Tynek, Maria; Drozdowski, Bronislaw

CORPORATE SOURCE: Department of Technology and Chemistry of Fats, Technical University of Gdansk, Gdansk, 80-952, Pol.

SOURCE: Journal of Food Lipids (2000), 7(4), 225-236
CODEN: JFFLES; ISSN: 1065-7258

PUBLISHER: Food & Nutrition Press, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The increase in consumption of food fried in the so-called "deep-frying-oil" entails the necessity of knowledge of both thermooxidative transformation occurring in the frying medium and chemical composition of oil absorbed by the fried product. The aim was to correlate the quality of frying medium and oil extracted from potato fritters, fried under rigorously controlled laboratory conditions in liquid and partially hydrogenated rapeseed oils. Oxidation and polymerization reactions predominated during deep frying of potato fritters in both frying media, but hydrolysis occurred only to a small degree. The peroxide value was not a suitable quality control indicator for monitoring the thermooxidative transformation during deep frying. The most suitable method for examining such transformations was to study the content and composition

of the polar fraction. A correlation existed between the amount of polymers and oxidized triacylglycerols (TAGs) and the amount of polar fraction. Small differences existed in the content of thermooxidative transformation products in the frying medium and the oil extracted from potato fritters. By monitoring anisidine value (AnV), E1%Icm and the content and composition of the polar fraction in the frying medium, it was possible to evaluate the quality of the fat in the fritters. Thus, the use of partially hydrogenated, compared to liquid rapeseed oil, in deep frying process may be preferred because at the same content of polar fraction and its components partially hydrogenated rapeseed oil contained a lesser amount of secondary oxidation products.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L56 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:683380 CAPLUS

DOCUMENT NUMBER: 130:24482

TITLE: Effect on plasma lipids and lipoproteins of replacing partially hydrogenated fish oil with vegetable fat in margarine

AUTHOR(S): Muller, Hanne; Jordal, Odd; Seljeflot, Ingebjorg; Kierulf, Peter; Kirkhus, Bente; Ledsaak, Oddlaug; Pedersen, Jan I.

CORPORATE SOURCE: Akershus College, Bekkestua, 1340, Norway

SOURCE: British Journal of Nutrition (1998), 80(3), 243-251
CODEN: BJNUAV; ISSN: 0007-1145

PUBLISHER: CABI Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We have compared the effects on blood serum lipoproteins and hemostatic variables of two hard margarines, one traditional margarine containing partially hydrogenated fish oil (PHFO) and one exptl.

margarine based on vegetable oil (VO). Both were all-purpose cooking margarines with nearly identical functional properties. Trans fatty acids in PHFO were replaced mostly by saturated, monounsaturated, and trans fatty acids of vegetable origin in VO. Both margarines contained approx. the same amts. of cis polyunsaturated fatty acids. Sixteen female normolipidemic students consumed diets with the 2 test margarines for 14 days. The fats provided 31% energy in the PHFO diet and 32% energy in the VO diet. The test margarines provided approx. 26% energy in both diets. In the PHFO diet, 7.8% energy was derived from trans fatty acids and 9.2% from saturated fatty acids (12:0, 14:0, 16:0), while in the VO diet, 1.1% energy was from trans fatty acids and 13.3% from saturated fatty acids (12:0, 14:0, 16:0). The natural content of cholesterol in PHFO was deliberately not balanced by the addition of cholesterol to the VO diet, thus the PHFO diet contained 215 mg and the VO diet 86 mg cholesterol per 8.5 MJ. Blood serum LDL-cholesterol concns. were 19 % higher in women on the PHFO diet compared with the VO diet. The LDL-cholesterol/HDL-cholesterol ratio was 12.6% higher in women on the PHFO diet compared with the VO diet. The level of apolipoprotein (apo) A-I was 6% lower in women on the PHFO diet compared with the VO diet. The ratio of apoB/apoA-I was 10.4% higher in women on the PHFO diet than on the VO diet. There were no differences in total cholesterol, HDL-cholesterol, triacylglycerols, apoB, lipoprotein(a), and hemostatic variables between the diet groups. Thus, PHFO with its unfavorable effects on blood lipids can be replaced by vegetable oils in margarine without appreciable loss of functional properties but with significant improvement in the effects on blood lipoproteins.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

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L1      5464 S CANDLE?
L2      140 S CANDLE WAX
L3      108 S CANDLE (4W) MATERIAL
L4      3048 S FOOD (4W) RESIDUE
L5      6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6      0 S L4 AND L5
L7      1119609 S (FAT# OR OIL#)
L8      203 S COOKING (3W) RESIDUE
L9      49 S L8 AND L7
L10     0 S L9 AND L5
L11     272 S COOKING (3W) WASTE
L12     0 S L11 AND L5
L13     0 S L12 AND L7
L14     7445 S FRYING
L15     4943 S L14 AND L7
L16     42 S L15 AND L5
L17     0 S L16 AND L1
L18     0 S L16 AND WAX
L19     0 S L16 AND L3
L20     25 S L7 AND L3
L21     0 S L20 AND L5
L22     105455 S WAX
L23     273 S L22 AND L5

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L24      0 S L23 AND L14
L25     4943 S L14 AND L7
L26     195 S L25 AND RESIDUE
L27      0 S L26 AND L5
L28      2 S L1 AND L5
L29     54685 S DEHYDROGENAT?
L30     216440 S LIPIDS
L31      94 S L29 AND L30
L32      1 S L31 AND L5
L33     1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
L34     118649 S L33 AND L7
L35     2957 S L34 AND L22
L36     12 S L35 AND L1
L37     12263 S COMMINUT?
L38      1 S L37 AND L4
L39     277 S GROUND (5W) FOOD
L40      6 S L39 AND L30
L41      0 S L40 AND L29
L42      3 S L29 AND L5
L43     540881 S EXTRACT
L44     10010 S L43 AND L30
L45     2300 S ANIMAL (3W) MATERIAL
L46     5821 S VEGETABLE (3W) MATERIAL
L47      0 S L44 AND L45 AND L46
L48      8 S L45 AND L44
L49      8 S L44 AND L46
L50     134369 S HYDROGENATE?
L51     2691 S L5 AND L7
L52     107 S L50 AND L51
L53      1 S L52 AND L22
L54     10641 S L7 AND COOKING
L55     499 S L54 AND L50
L56      4 S L55 AND L5

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=> s 17 and 114
L57     4943 L7 AND L14

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=> s 157 and 133
L58     413 L57 AND L33

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=> 158 and 130
L58 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

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=> s 158 and 130
L59     13 L58 AND L30

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=> s 158 and 129
L60      0 L58 AND L29

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=> s 114 and 133
L61     578 L14 AND L33

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=> s 161 and 129
L62      0 L61 AND L29

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=> s sterilized
L63 22032 STERILIZED

=> s l63 and l54
L64 79 L63 AND L54

=> s l64 and l5
L65 0 L64 AND L5

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
L2 140 S CANDLE WAX
L3 108 S CANDLE (4W) MATERIAL
L4 3048 S FOOD (4W) RESIDUE
L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6 0 S L4 AND L5
L7 1119609 S (FAT# OR OIL#)
L8 203 S COOKING (3W) RESIDUE
L9 49 S L8 AND L7
L10 0 S L9 AND L5
L11 272 S COOKING (3W) WASTE
L12 0 S L11 AND L5
L13 0 S L12 AND L7
L14 7445 S FRYING
L15 4943 S L14 AND L7
L16 42 S L15 AND L5
L17 0 S L16 AND L1
L18 0 S L16 AND WAX
L19 0 S L16 AND L3
L20 25 S L7 AND L3
L21 0 S L20 AND L5
L22 105455 S WAX
L23 273 S L22 AND L5
L24 0 S L23 AND L14
L25 4943 S L14 AND L7
L26 195 S L25 AND RESIDUE
L27 0 S L26 AND L5
L28 2 S L1 AND L5
L29 54685 S DEHYDROGENAT?
L30 216440 S LIPIDS
L31 94 S L29 AND L30
L32 1 S L31 AND L5
L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
L34 118649 S L33 AND L7
L35 2957 S L34 AND L22
L36 12 S L35 AND L1
L37 12263 S COMMINUT?
L38 1 S L37 AND L4
L39 277 S GROUND (5W) FOOD
L40 6 S L39 AND L30
L41 0 S L40 AND L29
L42 3 S L29 AND L5
L43 540881 S EXTRACT
L44 10010 S L43 AND L30

L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46
 L50 134369 S HYDROGENATE?
 L51 2691 S L5 AND L7
 L52 107 S L50 AND L51
 L53 1 S L52 AND L22
 L54 10641 S L7 AND COOKING
 L55 499 S L54 AND L50
 L56 4 S L55 AND L5
 L57 4943 S L7 AND L14
 L58 413 S L57 AND L33
 L59 13 S L58 AND L30
 L60 0 S L58 AND L29
 L61 578 S L14 AND L33
 L62 0 S L61 AND L29
 L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5

=> s 130 and 15
 L66 2927 L30 AND L5

=> s 166 and separate
 26906 SEPARATE
 21061 SEPARATES
 47254 SEPARATE
 (SEPARATE OR SEPARATES)
 303433 SEP
 12706 SEPS
 314909 SEP
 (SEP OR SEPS)
 357313 SEPARATE
 (SEPARATE OR SEP)

L67 56 L66 AND SEPARATE

=> s 167 and 150
 L68 2 L67 AND L50

=> d 168 1-2 ibib abs

L68 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:201029 CAPLUS
 DOCUMENT NUMBER: 136:275523
 TITLE: Separation of structured lipids by high
 performance liquid chromatography
 AUTHOR(S): Lee, K.-T.; Jones, K. C.; Foglia, T. A.
 CORPORATE SOURCE: Agricultural Research Service, Eastern Regional
 Research Center, U.S. Department of Agriculture,
 Wyndmoor, PA, 19038, USA
 SOURCE: Chromatographia (2002), 55(3/4), 197-201
 CODEN: CHRGB7; ISSN: 0009-5893
 PUBLISHER: Friedrich Vieweg & Sohn Verlagsgesellschaft mbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Medium-chain triacylglycerols (TAG) [tributyryl

(1,2,3-tributyrylglycerol), tricaproin (1,2,3-tricaproylglycerol), and tricaprylin (1,2,3-tricapryloylglycerol)] were subjected to acidolysis with stearic acid or interesterified with hydrogenated soybean oil (HSO) using an immobilized lipase as catalyst for the synthesis of structured lipids (SL). Normal phase (silica or cyanopropyl phases; NPSIL or NPCN, resp.) and reverse phase (octadecylsilane, RPODS) high performance liquid chromatog. (HPLC) with evaporative light-scattering detection (ELSD) were used to sep. the newly synthesized SL. The NP-HPLC methods fully resolved SL-TAG isomers containing butyryl (C4) and long-chain fatty acyl [stearoyl (C18) and palmitoyl (C16)] residues, but SL-TAG isomers composed of caproyl (C6) or capryloyl residues (C8) and long-chain fatty acyl residues were not fully resolved. The latter SL-TAG mols. were resolved using the RP-HPLC method. The HPLC methods were combined with mass spectrometric detection (LC-MS) to characterize the SL mol. species produced.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:274233 CAPLUS

DOCUMENT NUMBER: 130:320222

TITLE: Normal-phase high performance liquid chromatographic separation and characterization of short- and long-chain triacylglycerols

AUTHOR(S): Mangos, T. J.; Jones, K. C.; Foglia, T. A.

CORPORATE SOURCE: Agricultural Research Service, Eastern Regional Research Center, United States Department Agriculture, Wyndmoor, PA, 19038, USA

SOURCE: Chromatographia (1999), 49(7/8), 363-368

CODEN: CHRGB7; ISSN: 0009-5893

PUBLISHER: Friedrich Vieweg & Sohn Verlagsgesellschaft mbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Short- and long-chain triacylglycerols (SLCT) are a family of lipids prepared by chemical or enzymic interesterification of triacetin, tripropionin and/or tributyrin, and long-chain hydrogenated vegetable oils. In this study, a normal-phase cyanopropyl HPLC method was developed for the separation and quantification of SLCT. The method is capable of separating SLCT mixts., free fatty acids, and the neutral lipid classes of saturated long-chain tri-, di- and monoacylglycerols. To characterize the specific SLCT classes, a normal-phase HPLC procedure using a non-modified silica column was developed to sep. the SLCT into individual isomers based on total C number and position of fatty acids on the glycerol backbone. Online coupling with a mass detector (LC/MS) allowed the identification of the individual triacylglycerol structures.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?

L2 140 S CANDLE WAX

L3 108 S CANDLE (4W) MATERIAL

L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMINUT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5
 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46
 L50 134369 S HYDROGENATE?
 L51 2691 S L5 AND L7
 L52 107 S L50 AND L51
 L53 1 S L52 AND L22
 L54 10641 S L7 AND COOKING
 L55 499 S L54 AND L50
 L56 4 S L55 AND L5
 L57 4943 S L7 AND L14
 L58 413 S L57 AND L33
 L59 13 S L58 AND L30
 L60 0 S L58 AND L29
 L61 578 S L14 AND L33

L62 0 S L61 AND L29
 L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5
 L66 2927 S L30 AND L5
 L67 56 S L66 AND SEPARATE
 L68 2 S L67 AND L50

=> s recycled (4w) food

65721 RECYCLED

402585 FOOD

82112 FOODS

425584 FOOD

(FOOD OR FOODS)

L69 160 RECYCLED (4W) FOOD

=> s 169 and 17

L70 20 L69 AND L7

=> s 170 and separarate

0 SEPARARATE

L71 0 L70 AND SEPARARATE

=> s 170 and 143

L72 0 L70 AND L43

=> s 170 and 145

L73 0 L70 AND L45

=> d 170 1-10 ibib abs

L70 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:1187362 CAPLUS

TITLE: FT-IR analysis of recycled polystyrene for food packaging

AUTHOR(S): Kanwal, F.; Waraich, S. M.; Jamil, T.

CORPORATE SOURCE: Institute of Chemistry, University of the Punjab, Lahore, Pak.

SOURCE: Journal of the Chemical Society of Pakistan (2007), 29(3), 239-242

CODEN: JCSPDF; ISSN: 0253-5106

PUBLISHER: Chemical Society of Pakistan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Recycled polystyrene is used to form molds in various forms used as food containers. In this paper, we are reporting on the suitability of recycled polystyrene and virgin polystyrene used for manufacturing food containers in Pakistan. These polystyrene samples were kept in contact with the vegetable oil at different temps. ranging from 15-100 °C. These samples were analyzed by FT-IR and viscometer. The study demonstrates that recycled polystyrene undergoes some thermal degradation during recycling and the food containers prepared from these materials should not be used for storage of oily food at high temperature

L70 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:672357 CAPLUS

DOCUMENT NUMBER: 147:98485

TITLE: Hydrocarbon base oils manufactured from
oxygen-containing biologically derived sources
INVENTOR(S): Aalto, Pekka; Moilanen, Juha; Jokinen, Janne;
Koivusalmi, Eija; Myllyoja, Jukka; Jakkula, Juha;
Niemi, Vesa
PATENT ASSIGNEE(S): Neste Oil Oyj, Finland
SOURCE: PCT Int. Appl., 40pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007068799	A2	20070621	WO 2006-FI50552	20061212
WO 2007068799	A3	20070802		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
FI 2005005662	A	20070613	FI 2005-5662	20051212
PRIORITY APPLN. INFO.:			FI 2005-5662	A 20051212
			US 2005-749037P	P 20051212
AB A novel hydrocarbon source for manufacture of base oils (e.g., lubricating base oils), derived from oxygen-containing biol. derived materials, contain ≥ 90 weight% saturated hydrocarbons, ≤ 10 weight% linear paraffins, ≤ 0.1 weight% fused polycyclic naphthenes, 5-50 weight% monocyclic naphthenes, and contain < 300 ppm S and < 100 ppm N. The base oils have narrow boiling ranges, characterized by narrow (T90-T10) b.p. ranges of $\leq 150^\circ$, preferably $\leq 70^\circ$. The oxygen-containing biol. materials are typically hydrolyzed, with optional prehydrogenation, optionally hydroisomerized, then are subjected to hydrodeoxygenation (e.g., by reaction over MnO ₂ catalysts) with decarboxylative condensation to produce long-chain ketones that are hydrogenated to the long-chain paraffins. Typical feedstocks include free plant fats, plant oils, plant waxes, animal fats, animal oils, animal waxes, fish fats, oils waxes, etc., and their corresponding free fatty acids, fatty esters, fatty acid salts, fatty acid anhydrides, fatty alcs., recycled food-grade fats and oils, and genetically engineered fats, oils, and waxes.				

L70 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1018709 CAPLUS

DOCUMENT NUMBER: 146:6625

TITLE: A study on the migration of organic pollutants from
recycled paperboard packaging materials to solid food
matrices

AUTHOR(S): Triantafyllou, V. I.; Akrida-Demertzi, K.; Demertzis,

CORPORATE SOURCE: P. G.
 Department of Molecular Biology and Genetics,
 Democritus University of Thrace, Alexandroupolis,
 GR-68100, Greece

SOURCE: Food Chemistry (2006), Volume Date 2007, 101(4),
 1759-1768
 CODEN: FOCHDJ; ISSN: 0308-8146

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Paper and board are widely used as food packaging materials, mainly for disposable products. As public interest in conservation of natural resources has accelerated in the past several years, the use of recycled paper and board has increased. Recycled fiber materials can be used in certain limits as food contact materials. The safety of recycled fiber-based materials for food contact applications is largely dictated by the ability of post-consumer contaminants to be absorbed into recycled materials and later released by the packaging material and trapped on the food. The present work was undertaken with the aim of investigating the physicochem. behavior of selected model contaminants on paper and board, in contact with foodstuffs thus producing a fundamental set of data about their mobility from recycled paper and board into foods. More specifically, the kinetics of migration of selected model contaminants (surrogates) from contaminated recycled paper packaging samples into dry foodstuffs with different fat content was studied using a method based on solvent extraction and GC-FID quantification. Results showed the ability of selected contaminants of various types and various volatilities to potentially transfer to dry foods. The proportion of substances migrated to food was strongly dependent on the nature of the paper samples, fat content of the food, chemical nature and volatility of the migrant. The highest level of migration of organic pollutants was observed for the substrate with the highest fat content. Furthermore, it is shown that contact time and temperature have a significant effect on migration of model contaminants into foods.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:968503 CAPLUS

DOCUMENT NUMBER: 144:86991

TITLE: Potential migration of organic pollutants from recycled packaging materials into dry food

AUTHOR(S): Triantafyllou, V. I.; Akrida-Demertzi, K.; Demertzis, P. G.

CORPORATE SOURCE: Department of Molecular Biology and Genetics,
 Democritus University of Thrace, Alexandroupoli,
 GR-68100, Greece

SOURCE: Special Publication - Royal Society of Chemistry
 (2005), 300(Food Flavor and Chemistry), 283-290
 CODEN: SROCDO; ISSN: 0260-6291

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Paperboard packages represent a large and constantly growing part of the food packaging industry. To protect the environment the use of recycled paper as food contact material has increased. The safety of recycled fiber-based materials for food

contact applications is largely dictated by the ability of post-consumer contaminants to be absorbed into recycled materials and later released by the packaging material and trapped on the food. In the present work the migration of different organic surrogates from recycled paper into a dry food (high fat milk powder) has been.

investigated using a method based on solvent extraction and GC-FID quantification. Results showed that the extractive power of the food powder, under the exptl. conditions used, is high and that migration occurs rapidly. The proportion of substances migrated to food was strongly dependent on the nature of the paper samples, the fat content of the food and the chemical nature and volatility of the migrant.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:298562 CAPLUS

DOCUMENT NUMBER: 138:302859

TITLE: Evaluating the potential for recycling all PET bottles into new food packaging

AUTHOR(S): Begley, T. H.; McNeal, T. P.; Biles, J. E.; Paquette, K. E.

CORPORATE SOURCE: Food and Drug Administration, Washington, DC, 20204, USA

SOURCE: Food Additives and Contaminants (2002), 19(Suppl.), 135-143

CODEN: FACOEB; ISSN: 0265-203X

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To evaluate the feasibility of recycling all PET bottles into food packaging, realistic ests. of the maximum concentration of contaminants that might be expected in the polymer are needed. To estimate the maximum concentration of a

contaminant that might be in PET from the storage of non-food substances, sorption expts. into two types of PET were performed. These test materials were 0.8 mm thick amorphous PET (a relative sink for contaminants) and com. PET bottle wall. Using a com. shampoo containing 1% lindane (C₆H₆Cl₆), the test materials were stored in contact with the shampoo at 20 and 40°C for 231 days. This com. shampoo also represents an extreme case because it contains 7% acetone, a solvent which swells PET, further enhancing sorption of chems. Addnl. sorption expts. into PET were performed by preparing solns. of 10% toluene in Miglyol (a fractionated coconut oil), 10% benzophenone in Miglyol, 5% 2-butoxyethoxy ethanol (2-BE) in 50/50 water/ethanol, and 10% Me stearate in heptane. Sorption data from the shampoo into PET illustrate Fickian behavior. Specifically, the amount of sorption at room temperature is

.apprx.40

times less than that at 40°C. The amount of lindane sorbed into PET from the shampoo after 231 days was 0.1 and 3.7 mg dm⁻² at 20 and 40°C resp. These values correspond to 28 and 765 mg kg⁻¹ on a mass/mass basis. All sorptions are within the ranges measured and published by other authors using surrogate contamination testing schemes. Addnl., actual bottles from recycle bins were analyzed for the amount of contamination. Results are discussed in terms of potential consumer exposure to non-food contaminants in food containers made of recycled PET and in relation to the surrogate testing methods recommended by the Food and Drug Administration (FDA) for determining the compatibility of a PET

recycling process to produce containers suitable for food-contact use.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:198725 CAPLUS

DOCUMENT NUMBER: 136:293747

TITLE: The Belgian PCB/dioxin incident: analysis of the food
chain contamination and health risk evaluation

AUTHOR(S): Bernard, Alfred; Broeckaert, Fabrice; De Poorter,
Geert; De Cock, Ann; Hermans, Cedric; Saegerman,
Claude; Houins, Gilbert

CORPORATE SOURCE: Unit of Industrial Toxicology, Catholic University of
Louvain, Brussels, B-1200, Belg.

SOURCE: Environmental Research (2002), 88(1), 1-18
CODEN: ENVRAL; ISSN: 0013-9351

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Belgian PCB incident occurred at the end of Jan. 1999, when a mixture of polychlorinated biphenyls (PCBs) contaminated with dioxins was accidentally added to a stock of recycled fat used in the production of animal feeds. Although signs of poultry poisoning were noticed by Feb. 1999, the source and the extent of the contamination were discovered only in May 1999, when it appeared that more than 2500 farms could have been supplied with contaminated feeds. This resulted in a major food crisis, which rapidly extended to the whole country and could be resolved only by the implementation of a large PCB/dioxin food monitoring program. Screening for PCB contamination was based on the determination of the seven PCB markers. When PCB concns. exceeded the tolerance levels of 0.1 (milk), 0.2 (poultry, bovine, and pig meat), or 1 (animal feed) µg/g fat, dioxins (17 PCDD/Fs congeners) were also determined. At the end of Dec. 1999, the database contained the results of more than 55,000 PCB and 500 dioxin analyses. The study of PCB levels and profiles in contaminated feeds delivered to poultry or pig farms confirmed that the Belgian PCB incident was due to a single source of PCB oil introduced into the food chain at the end of Jan. 1999. This PCB oil had a congeners pattern closely matched to a mixture of Aroclor 1260/1254 in the proportion 75/25. The total amount of PCBs added to recycled fats was estimated at 50 kg (sum of the seven markers) or approx. 150 kg total PCBs, which corresponds to about 100 L of PCB oil. This PCB mixture contained about 1 g TEQ dioxins (more than 90% contributed by PCDFs) and about 2 g TEQ dioxin-like PCBs. The proportions of PCB 52 and 101 congeners were fairly constant in animal feeds, excluding the possibility of secondary contamination due to fat recycling from contaminated animals. The highest concns. of PCBs and dioxins were found in poultry and especially in the reproduction animals (hens and chicks), which showed the classical manifestations of chick edema disease. The pigs were also affected but to a lesser extent and no sign of intoxication was observed. The study of PCB/dioxin patterns and of the PCB:dioxin ratios revealed major differences in the metabolism of these compds. by farm animals. Whereas the PCBs:dioxins ratio was fairly constant in all poultry products with a mean value similar to that found in contaminated feeds (50,000), in pigs this ratio was both much higher and more variable (values up to 10,000,000), reflecting a faster elimination of dioxins than PCBs in these animals. These metabolic differences also emerged from the PCB and dioxin patterns which were altered much more in pigs than in poultry. Although the most contaminated food products (chicken meat) had PCB and dioxin levels more

than 100 times above maximal recommended values, it is unlikely that this incident could have caused adverse effects in the general population of Belgium. A doubling of the PCB and dioxin burden of the young adult population would require the consumption of, resp., 10 and 20 highly contaminated meals. In view of the very limited proportion of the poultry chain effectively contaminated during the incident (around 2%), such an extreme scenario was quite improbable for the general population except perhaps for farmers consuming their own products. But even in that case, it would have meant going back to the levels in the 1980s or attaining the body burden of subjects regularly eating contaminated seafood. (c) 2002 Academic Press.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:167658 CAPLUS

DOCUMENT NUMBER: 136:219510

TITLE: Procedure and apparatus for production of biofuels by using raw materials containing biogenic fats and/or oils

INVENTOR(S): Sundermann-Peters, Bernhard M.; Zimmermann, Bernhard

PATENT ASSIGNEE(S): Germany

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10040388	A1	20020307	DE 2000-10040388	20000818
PRIORITY APPLN. INFO.:			DE 2000-10040388	20000818

AB A procedure for manufacture of biofuels from raw materials containing biogenic fats and/or oils involves (1) defining of parameters characterizing combustion properties, (2) defining of the 1st parameter ranges which characterize desirable combustion properties of the biofuels, (3) providing of a raw material containing biogenic fats and/or oils, (4) determination of the parameter values of the raw material for the defined parameters, and (5) processing of the provided raw material so long until the parameter values fall into the defined 1st parameter ranges. The raw material is fed to 1 or several processing stages in relation to the determined parameters which are located outside the appropriate 1st parameter range. The procedure is suitable for processing of recycled and residual substances from food and cosmetic industries.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:472047 CAPLUS

DOCUMENT NUMBER: 135:64896

TITLE: Recycling of aluminum alloy from food packaging for using as engine parts

INVENTOR(S): Koch, Hubert; Krug, Peter; Schramm, Horst; Ost, Gerhard

PATENT ASSIGNEE(S): Aluminium Rheinfelden G.m.b.H., Germany

SOURCE: Eur. Pat. Appl., 19 pp.

DOCUMENT TYPE: CODEN: EPXXDW
 LANGUAGE: Patent
 German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1111077	A1	20010627	EP 1999-811210	19991224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2001006606	A1	20010705	US 2000-741469	20001219
MX 2000PA12836	A	20020523	MX 2000-PA12836	20001219
CA 2329561	A1	20010624	CA 2000-2329561	20001222
NO 2000006644	A	20010625	NO 2000-6644	20001222
BR 2000006375	A	20010724	BR 2000-6375	20001222
JP 2001254128	A	20010918	JP 2000-392101	20001225
US 2003129077	A1	20030710	US 2003-375596	20030227
PRIORITY APPLN. INFO.:			EP 1999-811210	A 19991224
			US 2000-741469	A3 20001219

AB Al alloy is recycled from scrap metal of food packages and treated by pyrolysis, melting, and casting for the production of cylinder blocks and heads, and oil sump pans. At least 50%, especially 80%, preferably 100% of the scrap is based on primary Al and the rest is primary Al and/or scrap metal on secondary Al. The scrap metal of primary Al consists of recycled food and animal food packages. The scrap material is separated, which depends on Al-content, thermal value, moisture content, bulk d., and particle size. The organic compds. of the scrap metal package are carbonized, whereby pyrolysis gas and coke is generated and discharged. The Al-based casting alloy contains Mg 3.0-5.0, Si 1.5-3.0, Mn 0.5-1.2, Cu 0.5-1.2, Ti 0-0.2, Co 0-0.4, Ce 0-0.4, Zr 0-1.2, V 0.02-0.15 weight% (preferably 0.02-0.08, especially 0.02-0.05), and Be <60 ppm. The Al alloy is suitable for the production of thermal- and corrosions-resistant parts of engines, especially for the production of cylinder blocks and heads, and oil sump pans by sand-, chill-, pressure-casting, thixocasting, and thixoforging.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2001:143690 CAPLUS
 DOCUMENT NUMBER: 134:194313
 TITLE: Voulme-reducing agents for polystyrene foams and method and apparatus for volume reducing
 INVENTOR(S): Kimura, Takao; Iniwa, Yoshiaki; Nakajima, Norihiro; Kashiwazaki, Masaru
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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Serial N 10/565361

JP 2001055467 A 20010227 JP 1999-231451 19990818
JP 3490031 B2 20040126

PRIORITY APPLN. INFO.: JP 1999-231451 19990818

AB The agents comprise solns. containing α -methylstyrene (I) and/or 2,4-diphenyl-4-methyl-1-pentene. The method turning styrenic waste foams to fuel oils comprise heat decomposition of polystyrene foams at relatively low temperature. Thus, 1 part polystyrene foam pieces (Mn approx. 70,000) recycled from food packaging materials were heated with 1 part I at 160° for 1 h, resulting in Mn with approx. 10,000.

L70 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:654501 CAPLUS

DOCUMENT NUMBER: 133:239522

TITLE: Printing ink prepared from recycled vegetable oil

INVENTOR(S): Sanada, Takeshi; Ishimoto, Manabu; Yamaoka, Shintaro

PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan; Toyo Ink Mfg. Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000256603	A	20000919	JP 1999-58498	19990305
JP 3643720	B2	20050427		
JP 2001214103	A	20010807	JP 2001-37054	19990305
JP 2001214104	A	20010807	JP 2001-37056	19990305
JP 2001214105	A	20010807	JP 2001-37058	19990305
JP 2001214102	A	20010807	JP 2001-37057	20010214
JP 3616019	B2	20050202		
JP 2001254032	A	20010918	JP 2001-37055	20010214
JP 3616018	B2	20050202		

PRIORITY APPLN. INFO.: JP 1999-58498 A3 19990305

AB The title ink, with low organic compound emission to atmospheric, easy cleaning of

printing machine, and biodegradable, is prepared from recycled vegetable oil of food processing with water content <0.3%, iodine value >100, and acid value <3.

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(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
L2 140 S CANDLE WAX
L3 108 S CANDLE (4W) MATERIAL
L4 3048 S FOOD (4W) RESIDUE
L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6 0 S L4 AND L5
L7 1119609 S (FAT# OR OIL#)
L8 203 S COOKING (3W) RESIDUE

L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMINUT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5
 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46
 L50 134369 S HYDROGENATE?
 L51 2691 S L5 AND L7
 L52 107 S L50 AND L51
 L53 1 S L52 AND L22
 L54 10641 S L7 AND COOKING
 L55 499 S L54 AND L50
 L56 4 S L55 AND L5
 L57 4943 S L7 AND L14
 L58 413 S L57 AND L33
 L59 13 S L58 AND L30
 L60 0 S L58 AND L29
 L61 578 S L14 AND L33
 L62 0 S L61 AND L29
 L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5
 L66 2927 S L30 AND L5

L67 56 S L66 AND SEPARATE
 L68 2 S L67 AND L50
 L69 160 S RECYCLED (4W) FOOD
 L70 20 S L69 AND L7
 L71 0 S L70 AND SEPARARATE
 L72 0 S L70 AND L43
 L73 0 S L70 AND L45

=> d 170 11-20 ibib abs

L70 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:629047 CAPLUS

DOCUMENT NUMBER: 133:309198

TITLE: Safety of food packaging materials

AUTHOR(S): Komolprasert, Vanee

CORPORATE SOURCE: Division of Food Processing and Packaging, US Food and Drug Administration, National Center for Food Safety and Technology, Summit-Argo, IL, 60501, USA

SOURCE: Nippon Hoso Gakkaishi (1999), 8(6), 283-288

CODEN: NHGIEE; ISSN: 0918-5283

PUBLISHER: Nippon Hoso Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This paper focuses on 2 studies that are directly related to the safety issues of food packaging materials. The first study determined whether the secondary recycled polyethylene terephthalate (PET or PETE) was suitable for direct food contact applications. The second study determined the effects of gamma and e-beam radiation on food packaging intended for use with prepackaged irradiated foods. In the first study, the test protocol suggested by the FDA (FDA, 1992) for the chemical recycling processes was used. The test protocol suggested the use of several surrogate chems. with different phys. and chemical properties to simulate the chemical contaminants that may be present in the recycled PET. These chemical contaminants could be introduced to the materials via misuse of the PET bottles for temporary storage of chems. such as gasoline, used motor oil, and household insecticides. The expts. involved spiking virgin PET materials with these chems., and subjecting the contaminated PET to secondary (phys.) recycling processes (aqueous-based washing, thermal drying and extrusion remelting). The efficacy of the selected recycling process conditions on removal of the surrogates from the PET and the potential migration of these chemical residues from the post-treatment PET into food simulating solvents were determined. In a second study, food packaging materials of com. interest have been selected as a model, irradiated with gamma and electron beam radiation at various irradiation conditions and stored at various storage conditions. Volatile and nonvolatile compds. that are present in the test materials before and after irradiation were analyzed and compared for the effect of irradiation on

the

test materials. Anal. methods and some initial research results for evaluating the suitability and safety of the food packaging materials intended for prepackaged irradiated foods are included.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:11883 CAPLUS

DOCUMENT NUMBER: 132:165532

TITLE: Physiologic changes in humans subjected to severe,

selective calorie restriction for two years in Biosphere 2: health, aging, and toxicological perspectives

AUTHOR(S): Walford, Roy L.; Mock, Dennis; MacCallum, Taber; Laseter, John L.

CORPORATE SOURCE: Department of Pathology and Department of Surgery/Neurology, UCLA School of Medicine, Los Angeles, CA, 90095, USA

SOURCE: Toxicological Sciences (1999), 52(2, Suppl.), 61-65
CODEN: TOSCF2; ISSN: 1096-6080

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Biosphere 2 is a closed ecol. space of 7-million cubic feet near Tucson, AZ, containing 7 biomes: rain forest, Savannah, ocean, marsh, desert, agricultural station, and habitat for humans and domestic animals. Sealed inside, 4 men and 4 women maintained themselves and the various systems for 2 yr. All organic material, all water, and nearly all air was recycled, and virtually all food was grown inside. On the low calorie but nutrient-dense diet available, the men sustained 18% and the women 10% weight loss, mostly within the first 6 to 9 mo. The nature of the diet duplicated rodent diets that had been shown to enhance health, lower disease incidence, and retard aging. Using blood specimens frozen at different points during and after the 2 yr, detns. were made of a number of biochem. parameters judged to be pertinent based on past studies of rodents and monkeys on similar diets. These included blood lipids, glucose, insulin, glycosylated Hb, renin, and others. The results clearly suggest that humans react to such a nutritional regime similarly to other vertebrates. In addition to these studies, and because this was a tightly closed, isolated environment, the levels of insecticides or pollutants or their derivs. were determined in the sera of 2 crew members. It was found that levels of the lipophilic toxicant DDE and the "total PCB" load increased with the loss of body fat during the first 12-18 mo inside Biosphere 2, then decreased.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:767264 CAPLUS

DOCUMENT NUMBER: 132:5995

TITLE: Life cycle analysis of the recycling of food-oil waste material as detergent

AUTHOR(S): Shizume, Shihoko; Sakata, Naoko; Miyokawa, Kikuo

CORPORATE SOURCE: Graduate School of Economics, Hitotsubashi University, Tokyo, 186-8601, Japan

SOURCE: Haikibutsu Gakkai Ronbunshi (1999), 10(5), 267-275
Published in: Haikibutsu Gakkaishi, 10(5)

CODEN: HGROEE

PUBLISHER: Haikibutsu Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The life cycle energy consumption (LEC) and CO2 emission (LCE) of soap made from recycled food-oil waste (FOW) by the S-plant of Kawasaki were compared with those of the following alternative FOW treatments: (A) discharge into the municipal sewage system, (B) disposal as combustible trash after being treated with an oil-solidifying reagent, and (C) disposal as combustible trash after being absorbed in newspaper. An inventory anal. of the production of

regular recycled detergent indicated that it is unfavorable with respect to both energy consumption and CO2 emission compared with detergent made from vegetable oil. On the basis of the official data concerning the municipal sewage and garbage treatments of Kawasaki along with several tacit assumptions, the LEC and LCE/Kg of recycled detergent and those of the equivalent amount of oil waste were calculated as follows (treatment/MJ/Kg CO2): recycled soap/13/1.8, A/9.8/2.3, B/0.7/2.2, C (0% newspaper recycling)/-1.7/2.0, and C (100% newspaper recycling)/8.2/6.2.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:86994 CAPLUS

DOCUMENT NUMBER: 130:124089

TITLE: Food pollution by bilayer package with a recycled polymer. Effect of some parameters

AUTHOR(S): Laoubi, S.; Vergnaud, J. M.; Mouffok, B.

CORPORATE SOURCE: Lab. Materials Chem. Eng., Fac. Sci., Univ.

St-Etienne, Saint-Etienne, F-42023, Fr.

SOURCE: Macromolecular Symposia (1998), 135(38th

Microsymposium on Recycling of Polymers, 1997), 277-285

CODEN: MSYMEC; ISSN: 1022-1360

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A way of recycling waste polymers consists in reusing them as new food packages. Because of potential contamination, bilayer packages are made with a virgin polymer located between the recycled polymer layer and the food. The virgin polymer layer plays the role of a functional barrier to contamination. Some emphasis is placed on the thickness of each polymer layer by keeping the thickness of the package constant and on the volume of food. The process of contaminant transfer is controlled by transient diffusion through the bilayer package and convection into the liquid food. A numerical model, predicting the kinetics of contaminant transfer in the food and the profiles of concentration of contaminant developed through the package, was elaborated. The thickness of the package is 0.03 cm and the volume of food .apprx.730 cm3. The characteristics are those of polypropylene for packaging and olive oil for food. The effect of the volume of the food in liquid state on the kinetics of transfer is also considered.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:746396 CAPLUS

DOCUMENT NUMBER: 128:14862

TITLE: Recycling of waste vegetable oils

AUTHOR(S): Takehara, Atsuhiko; Moritani, Yasuji; Hongyo,

Setsuaki; Nagata, Kazuya

CORPORATE SOURCE: Ind. Technol. Cent. Okayama Prefect., Okayama, 700, Japan

SOURCE: Okayama-ken Kogyo Gijutsu Senta Hokoku (1997), 23, 89-90

CODEN: OKSHDY; ISSN: 0386-149X

PUBLISHER: Okayama-ken Kogyo Gijutsu Senta

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB A total of 400,000 tons of waste vegetable oils is discharged annually in Japan, and 90% of those from com. facilities is recycled into animal foods and fertilizers. This study investigates the effects of waste vegetable oil, blended in kerosene to 10%, on exhaust gases and combustion system, where the mixed fuel is burnt for 5 h in a day for 6 mo in a heater for small-size domestic hot-water supply system. No abnormal conditions are observed both in exhaust gases and system. However, low volatility makes vegetable oil inapplicable to fan heaters.

L70 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:403128 CAPLUS
DOCUMENT NUMBER: 127:94309
TITLE: Toward a Test of Overall Migration from the Coated Face of a Recycled Paperboard Food Contact Material into Fatty Food Simulants
AUTHOR(S): Sarria-Vidal, Miguel; de la Montana-Miguel, Julia; Simal-Gandara, Jesus
CORPORATE SOURCE: Nutrition and Bromatology Group Analytical and Food Chemistry Department Food Science and Technology Faculty, University of Vigo, Ourense, 32004, Spain
SOURCE: Journal of Agricultural and Food Chemistry (1997), 45(7), 2701-2707
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The main aim of the present work was to evaluate the suitability of recycled paperboard coated on its internal face for use in containers that contact fried foods. Suitability was assessed in terms of overall migration into fatty food simulants and in terms of the residue extracted into n-heptane. Testing of the packaging was carried out following the guidelines laid down by the EU for plastic packaging, and also those established by the FDA for the extractive testing of paper and paperboard for use in food contact. With a view to simplifying the test procedures, the results of the official tests were compared with those obtained using alternative fatty food simulants under comparable sets of test conditions. The overall migration test using olive oil as the fatty food simulant was an adaptation of the European Committee for Standardization (CEN) test developed for plastic materials. Two methods for determination of the amount of olive oil absorbed by the paperboard during the tests were compared: a gravimetric method and a modification of the CEN gas chromatog. method. Finally, the packaging materials were extracted with solvents of several different polarities in order to develop a test allowing preliminary identification of major potential migrating components in paperboard contributing to EU overall migration levels and FDA extractive levels.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:717210 CAPLUS
DOCUMENT NUMBER: 126:6752
TITLE: Evaluating organic compound migration in poly(ethylene terephthalate): a simple test with implications for polymer recycling
AUTHOR(S): Sadler, G.; Pierce, D.; Lawson, A.; Suvannunt, D.;

Senthil, V.
 CORPORATE SOURCE: Natl. Center Food Safety and Technology, Illinois
 Institute Technology, Summit-Argo, IL, 60501-1933, USA
 SOURCE: Food Additives and Contaminants (1996), 13(8), 979-989
 CODEN: FACOEB; ISSN: 0265-203X
 PUBLISHER: Taylor & Francis
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The safety of recycled plastics for food contact use
 is largely dictated by the ability of post-consumer organic contaminants to
 absorb into recycled materials and later diffuse from containers made from
 recycled plastics into the food supply. Diffusion and
 solubility data for organic contaminants in poly(ethylene terephthalate) (PET)
 are scarce. An approach for determining permeability consts., diffusion coeffs.
 and solubility consts. of slowly migrating contaminants in PET is described.
 Comps. (neat or in admixt.) were heat-sealed in packets made from thin
 (0.00127 cm) PET films. Packets were placed in containers with GC
 sampling closures. Headspace (volatile compds.) or an external liquid
 medium (non-volatile compds.) was analyzed for emergence of the compound
 Diffusion coeffs. were determined from non-steady state diffusion equations,
 permeability consts. were determined from steady state permeation, and
 solubility consts. were calculated from diffusion and permeability values. Diffusion
 coeffs. (25°C) ranged from 10⁻⁹ to <10⁻¹⁶ cm²/s. The diffusion
 coefficient of benzene increased dramatically with concentration Comps. with
 high permeation increased the transport rate of slower permeating volatiles.

L70 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1993:601910 CAPLUS
 DOCUMENT NUMBER: 119:201910
 TITLE: Recycled plastics for food
 packaging
 AUTHOR(S): Thorsheim, Helen R.; Armstrong, David J.
 CORPORATE SOURCE: Indirect Additives Branch, FDA, Washington, DC, 20204,
 USA
 SOURCE: CHEMTECH (1993), 23(8), 55-8
 CODEN: CHTEDD; ISSN: 0009-2703
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English

AB A review with 3 refs. Currently, no regulations have been issued for the
 use of recycled polymers in contact with food.
 Plastics are permeable, and the possibility that a contaminant such as a
 pesticide or motor oil might be absorbed by a plastic container
 and remain in the resin after recycling is very real. Here the routes of
 recycling, contaminants, testing of the recycling process, a
 polymer-specific testing protocol, and acceptable food-contact uses are
 discussed.

L70 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1993:407519 CAPLUS
 DOCUMENT NUMBER: 119:7519
 TITLE: Organoleptic and migrational properties of
 polypropylene (PP) films produced with various amounts
 of scrap
 AUTHOR(S): Lox, F.; Van Dael, S.; Machiels, V.

CORPORATE SOURCE: Inst. Sci. Technol., Univ. Gent, Ghent, B-9000, Belg.
SOURCE: Packaging Technology & Science (1992), 5(6), 307-12
CODEN: PTSCEQ; ISSN: 0894-3214

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Many polymeric materials, e.g. polyvinyl chloride (PVC) and polyethylene (PE), are processed with 20% scrap added to the virgin material. Polypropylene (PP) scrap seems to be very susceptible to the generation of new odorous products during the thermoforming processes. This study is aimed at defining the highest possible reapplication rate of PP scrap. Films made of 20-60% scrap plus virgin material and of 100% scrap were investigated; 6 different PP blends were used. The migrational behavior was assessed in contact with various food simulants at 40° for 10 days. Migration was followed using a spectrophotometric method and finally determined by measuring the residue left after evaporation of the simulant.

The organoleptic properties were also evaluated following the NBN S29-001 standard. Organoleptic changes were detected at such an intensity as to eliminate plastic for food contact purposes, but as yet no changes in migrational behavior were found. The addition of >30% regenerated PP was not acceptable.

L70 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:67114 CAPLUS

DOCUMENT NUMBER: 80:67114

ORIGINAL REFERENCE NO.: 80:10847a

TITLE: Electron-capturing compounds and selected elements in paper

AUTHOR(S): Serum, J. W.; Tong, S. C.; St. John, L. E.; Bache, C. A.; Mertens, D. R.; Lisk, D. J.

CORPORATE SOURCE: Dep. Chem., Cornell Univ., Ithaca, NY, USA

SOURCE: Bulletin of Environmental Contamination and Toxicology (1973), 10(2), 88-96
CODEN: BECTA6; ISSN: 0007-4861

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The presence of hexane-extractable and apparently fat-soluble chlorine [7782-50-5]-containing compds. was observed in fine-milled paper samples

from various publications, and the paper of Parade magazine contained toxicol. important high levels of antimony [7440-36-0], lead [7439-92-1], and barium [7440-39-3]. The presence of polychlorinated biphenyls (PCB) and other chlorinated compds. in gray cardboard was indicated by the appearance of isotopic Cl clusters at the appropriate masses for PCB-type compds. and also at masses not corresponding to PCB's. Caution and further study is needed when paper is recycled for use in food containers or as a cellulose substitute in animal feeds.

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(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
L2 140 S CANDLE WAX
L3 108 S CANDLE (4W) MATERIAL
L4 3048 S FOOD (4W) RESIDUE

L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
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 L12 0 S L11 AND L5
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 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
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 L29 54685 S DEHYDROGENAT?
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 L50 134369 S HYDROGENATE?
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 L60 0 S L58 AND L29
 L61 578 S L14 AND L33
 L62 0 S L61 AND L29

L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5
 L66 2927 S L30 AND L5
 L67 56 S L66 AND SEPARATE
 L68 2 S L67 AND L50
 L69 160 S RECYCLED (4W) FOOD
 L70 20 S L69 AND L7
 L71 0 S L70 AND SEPARATE
 L72 0 S L70 AND L43
 L73 0 S L70 AND L45

=> s s food

3057348 S
 402585 FOOD
 82112 FOODS
 425584 FOOD
 (FOOD OR FOODS)
 L74 1332 S FOOD
 (S(W) FOOD)

=> s 174 and 133

L75 144 L74 AND L33

=> s 175 and 17

L76 16 L75 AND L7

=> d 176 1-8 ibib abs

L76 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:439666 CAPLUS

DOCUMENT NUMBER: 146:467843

TITLE: Final report on the safety assessment of Capsium
 Annuum Extract, Capsicum Annuum Fruit Extract,
 Capsicum annuum resin, capsicum annuum fruit powder,
 Capsicum Frutescens Fruit, Capsicum Frutescens Fruit
 Extract, Capsicum frutescens resin, and Capsaicin

AUTHOR(S): Anon.

CORPORATE SOURCE: USA

SOURCE: International Journal of Toxicology (2007), 26(Suppl.
 1), 3-106

CODEN: IJTOFN; ISSN: 1091-5818

PUBLISHER: Informa Healthcare USA, Inc.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Capsicum-derived ingredients function as skin-conditioning agents-miscellaneous, external analgesics, flavoring agents, or fragrance components in cosmetics. These ingredients are used in 19 cosmetic products at concns. as high as 5%. Cosmeticgrade material may be extracted using hexane, ethanol, or vegetable oil and contain the full range of phytocompounds that are found in the Capsicum annuum or Capsicum frutescens plant (aka red chiles), including Capsaicin. Aflatoxin and N-nitroso compds. (N-nitrosodimethylamine and N-nitrosopyrrolidine) have been detected as contaminants. The UV absorption spectrum for Capsicum Annuum Fruit Extract indicates a small peak at approx. 275 nm, and a gradual increase in absorbance, beginning at approx. 400 nm. Capsicum and paprika are generally recognized as safe by the U.S. Food and Drug Administration for use in food. Hexane, chloroform, and Et acetate

exts. of Capsicum Frutescens Fruit at 200 mg/kg resulted in death of all mice. In a short-term inhalation toxicity study using rats, no difference was found between vehicle control and a 7% Capsicum Oleoresin solution. In a 4-wk feeding study, red chilli (Capsicum annuum) in the diet at concns. up to 10% was relatively nontoxic in groups of male mice. In an 8-wk feeding study using rats, intestinal exfoliation, cytoplasmic fatty vacuolation and centrilobular necrosis of hepatocytes, and aggregation of lymphocytes in the portal areas were seen at 10% Capsicum Frutescens Fruit, but not 2%. Rats fed 0.5 g/kg day-1 crude Capsicum Fruit Extract for 60 days exhibited no significant gross pathol. at necropsy, but slight hyperemia of the liver and reddening of the gastric mucosa were observed. Weanling rats fed basal diets supplemented with whole red pepper at concns. up to 5.0% for up to 8 wk had no pathol. of the large intestines, livers, and kidneys, but destruction of the taste buds and keratinization and erosion of the gastrointestinal (GI) tract were noted in groups fed 0.5% to 5.0% red pepper. The results of 9- and 12-mo extension of this study showed normal large intestines and kidneys. In rabbits fed Capsicum Annuum Powder at 5 mg/kg day-1 in the diet daily for 12 mo damage to the liver and spleen was noted. A rabbit skin irritation test of Capsicum Annuum Fruit Extract at concns. ranging from 0.1% to 1.0% produced no irritation, but Capsicum Frutescens Fruit Extract induced concentration-dependent (at 25

to 500

µg/mL) cytotoxicity in a human buccal mucosa fibroblast cell line. An ethanol extract of red chili was mutagenic in Salmonella typhimurium TA98, but not in TA100, or in Escherichia coli. Other genotoxicity assays gave a similar pattern of mixed results. Adenocarcinoma of the abdomen was observed in 7/20 mice fed 100 mg red chilies per day for 12 mo; no tumors were seen in control animals. Neoplastic changes in the liver and intestinal tumors were observed in rats fed red chili powder at 80 mg/kg day-1 for 30 days, intestinal and colon tumors were seen in rats fed red chili powder and 1,2-di-Me hydrazine, but no tumors were observed in controls. In another study in rats, however, red chile pepper in the diet at the same dose decreased the number of tumors seen with 1,2-dimethylhydrazine. Other feeding studies evaluated the effect of red chili peppers on the incidence of stomach tumors produced by N-methyl-N'-nitro-N-nitrosoguanidine, finding that red pepper had a promoting effect. Capsicum Frutescens Fruit Extract promoted the carcinogenic effect of methyl(acetoxymethyl)nitrosamine (carcinogen) or benzene hexachloride (hepatocarcinogen) in inbred male and female Balb/c mice dosed orally (tongue application). Clin. findings include symptoms of cough, sneezing, and runny nose in chili factory workers. Human respiratory responses to Capsicum Oleoresin spray include burning of the throat, wheezing, dry cough, shortness of breath, gagging, gasping, inability to breathe or speak, and, rarely, cyanosis, apnea, and respiratory arrest. A trade name mixture containing 1% to 5% Capsicum Frutescens Fruit Extract induced very slight erythema in 1 of 10 volunteers patch tested for 48 h. Capsicum Frutescens Fruit Extract at 0.025% in a repeated-insult patch test using 103 subjects resulted in no clin. meaningful irritation or allergic contact dermatitis. One epidemiol. study indicated that chili pepper consumption may be a strong risk factor for gastric cancer in populations with high intakes of chili pepper; however, other studies did not find this association. Capsaicin functions as an external analgesic, a fragrance ingredient, and as a skin-conditioning agent-miscellaneous in cosmetic products, but is not in current use.

Capsaicin is

not generally recognized as safe and effective by the U.S. Food and Drug Administration for fever blister and cold sore treatment, but is considered to be safe and effective as an external

analgesic counterirritant. Ingested Capsaicin is rapidly absorbed from the stomach and small intestine in animal studies. S.c. injection of Capsaicin in rats resulted in a rise in the blood concentration, reaching a maximum

at 5 h; the highest tissue concns. were in the kidney and lowest in the liver. In vitro percutaneous absorption of Capsaicin has been demonstrated in human, rat, mouse, rabbit, and pig skin. Enhancement of skin of naproxen (nonsteroidal anti-inflammatory agent) in the presence of Capsaicin has also been demonstrated. Pharmacol. and physiol. studies demonstrated that Capsaicin, which contains a vanillyl moiety, produces its sensory effects by activating a Ca^{2+} -permeable ion channel on sensory neurons. Capsaicin is a known activator of vanilloid receptor 1. Capsaicin-induced stimulation of prostaglandin biosynthesis has been shown using bull seminal vesicles and rheumatoid arthritis synoviocytes. Capsaicin inhibits protein synthesis in Vero kidney cells and human neuroblastoma SHSY-5Y cells in vitro, and inhibits growth of *E. coli*, *Pseudomonas solanacearum*, and *Bacillus subtilis* bacterial cultures, but not *Saccharomyces cerevisiae*. Oral LD50 values as low as 161.2 mg/kg (rats) and 118.8 mg/kg (mice) have been reported for Capsaicin in acute oral toxicity studies, with hemorrhage of the gastric fundus observed in some of the animals that died. I.v., i.p., and s.c. LD50 values were lower. In subchronic oral toxicity studies using mice, Capsaicin produced statistically significant differences in the growth rate and liver/body weight increases. Capsaicin is an ocular irritant in mice, rats, and rabbits. Dose-related edema was observed in animals receiving Capsaicin injections into the hind-paw (rats) or application to the ear (mice). In guinea pigs, dinitrochlorobenzene contact dermatitis was enhanced in the presence of Capsaicin, injected s.c., whereas dermal application inhibited sensitization in mice. Immune system effects have been observed in neonatal rats injected s.c. with Capsaicin. Capsaicin produced mixed results in *S. typhimurium* micronucleus and sister-chromatid exchange genotoxicity assays. Pos. results for Capsaicin were reported in DNA damage assays. Carcinogenic, cocarcinogenic, anticarcinogenic, antitumorigenic, tumor promotion, and anti-tumor promotion effects of Capsaicin have been reported in animal studies. Except for a significant reduction in crown-rump length in day 18 rats injected s.c. with Capsaicin (50 mg/kg) on gestation days 14, 16, 18, or 20, no reproductive or developmental toxicity was noted. In pregnant mice dosed s.c. with Capsaicin, depletion of substance P in the spinal cord and peripheral nerves of pregnant females and fetuses was noted. In clin. tests, nerve degeneration of intracutaneous nerve fibers and a decrease in pain sensation induced by heat and mech. stimuli were evident in subjects injected intradermally with Capsaicin. An increase in mean inspiratory flow was reported for eight normal subjects who inhaled nebulized 10^{-7} M Capsaicin. The results of provocative and predictive tests involving human subjects indicated that Capsaicin is a skin irritant. Overall, studies suggested that these ingredients can be irritating at low concns. Although the genotoxicity, carcinogenicity, and tumor promotion potential of Capsaicin have been demonstrated, so have opposite effects. Skin irritation and other tumor-promoting effects of Capsaicin appear to be mediated through interaction with the same vanilloid receptor. Given this mechanism of action and the observation that many tumor promoters are irritating to the skin, the Panel considered it likely that a potent tumor promoter may also be a moderate to severe skin irritant. Thus, a limitation on Capsaicin content that would significantly reduce its skin irritation potential is expected to, in effect, lessen any concerns relating to tumor promotion potential. Because Capsaicin enhanced the penetration of an anti-inflammatory agent through human skin, the Panel recommends that care should be exercised in

using ingredients that contain Capsaicin in cosmetic products. The Panel advised industry that the total polychlorinated biphenyl (PCB)/pesticide contamination should be limited to not more than 40 ppm, with not more than 10 ppm for any specific residue, and agreed on the following limitations for other impurities: arsenic (3 mg/kg max), heavy metals (0.002% max), and lead (5 mg/kg max). Industry was also advised that aflatoxin should not be present in these ingredients (the Panel adopted ≤ 15 ppb as corresponding to "neg." aflatoxin content), and that ingredients derived from Capsicum annuum and Capsicum Frutescens Plant species should not be used in products where N-nitroso compds. may be formed. The Cosmetic Ingredient Review (CIR) Expert Panel concluded that Capsaicin and Capsicum Annuum Extract, Capsicum Annuum Fruit Extract, Capsicum Annuum Resin, Capsicum Annuum Fruit Powder, Capsicum Frutescens Fruit, Capsicum Frutescens Fruit Extract, and Capsicum Frutescens Resin are safe as cosmetics in the practices of use and concentration as described in

this

safety assessment, when formulated not to be irritating.

REFERENCE COUNT: 464 THERE ARE 464 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:888010 CAPLUS

DOCUMENT NUMBER: 146:232458

TITLE: Conversion of used vegetable oils to liquid fuels and chemicals over HZSM-5, sulfated zirconia and hybrid catalysts

AUTHOR(S): Charusiri, Witchakorn; Yongchareon, Withaya; Vitidsant, Tharapong

CORPORATE SOURCE: Energy Research Institute, Faculty of Science, Chulalongkorn University, Bangkok, 10330, Thailand

SOURCE: Korean Journal of Chemical Engineering (2006), 23(3), 349-355

CODEN: KJCHE6; ISSN: 0256-1115

PUBLISHER: Korean Institute of Chemical Engineers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thailand's food manufacturing uses about 47 Million liters per yr of vegetable oil. Used vegetable oil is classified as waste, but has potential for conversion into liquid fuel. This research studied the catalytic conversion of used vegetable oil to liquid fuel, where investigation was performed in a batch microreactor over a temperature range of 380-430 °C, initial pressure of hydrogen gas over 10-20 bars, and reaction time of 45-90 min. Catalysts such as HZSM-5, sulfated zirconia and hybrid of HZSM-5 with sulfated zirconia were used to determine the conversion and yield of gasoline fraction. The major products obtained were liquid products, hydrocarbon gases and small amts. of solids. Liquid products were analyzed by simulated distillation gas chromatograph and the product distribution was obtained. Hybrid catalyst HZSM-5 with sulfated zirconia showed the highest yield of gasoline with a 26.57 wt% at a temperature of 430 °C, initial hydrogen pressure at 10 bars, and reaction time of 90 min in the ratio of hybrid HZSM-5 with sulfated zirconia at 0.3: 0.7.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:187050 CAPLUS

TITLE: Structure/function relationships between corn kernel arabinoxylans and their emulsifying properties
 AUTHOR(S): Yadav, Madhav P.; Johnston, David B.; Hicks, Kevin B.
 CORPORATE SOURCE: Crop Conversion Science and Engineering Research, Eastern Regional Research Center, ARS, USDA, Wyndmoor, PA, 19038, USA
 SOURCE: Abstracts of Papers, 229th ACS National Meeting, San Diego, CA, United States, March 13-17, 2005 (2005), CELL-225. American Chemical Society: Washington, D. C.
 CODEN: 69GQMP
 DOCUMENT TYPE: Conference; Meeting Abstract
 LANGUAGE: English
 AB The U.S. food industry needs a domestically produced gum with a dependable supply and consistent quality, which can be used for preparing oil-in-water emulsions, such as citrus oil emulsions for beverages. Corn Fiber Gum (CFG) is an arabinoxylan (hemicellulose) extracted from the kernel pericarp and/or endosperm fiber fractions that can possibly fulfill this need. CFGs were prepared from corn fiber collected from different wet or dry corn milling facilities by (a) sequential alkaline extraction and alkaline hydrogen peroxide bleaching and (b) alkaline hydrogen peroxide treatment of alkali treated residues. The stabilization of oil-in-water emulsions by CFG was investigated by preparing the emulsions with a high pressure homogenizer and monitoring the emulsion breakage by turbidity measurements. The results from the CFG emulsifying studies are compared with acacia gum and also related to the structure and composition of the different CFG isolates.

L76 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:953353 CAPLUS
 TITLE: The Center for Analytical Chemistry, A Broad Spectrum of Analytical Capabilities
 AUTHOR(S): Sen, Lourminia C.
 CORPORATE SOURCE: State of California, Center for Analytical Chemistry, Sacramento, CA, 95814, USA
 SOURCE: Abstracts, 39th Western Regional Meeting of the American Chemical Society, Sacramento, CA, United States, October 27-30 (2004), GEN-079. American Chemical Society: Washington, D. C.
 CODEN: 69FWDT
 DOCUMENT TYPE: Conference; Meeting Abstract
 LANGUAGE: English

AB From orgs. to inorgs. and from percent level to ppb, the Center for Anal. Chemical have been providing agrochem. anal. for our Department of Food and Agriculture since the mid 1920's. Currently, we also provide contracted anal. services for regulatory programs from other departments within the State of California. In addition, we are participating in several anal. projects with federal funding. Our program includes pesticide residue testing of fresh produce as an integral part of the state's food safety program. A federally funded program analyzes pesticide residue for dietary risk assessment of pesticides in highly consumed produce. Our Center performs analyses to measure the environmental fate of pesticides. We also participate in projects designed to measure exposure of workers who apply pesticides. Another program performs chemical analyses to assure label compliance, check for adulteration or contamination of pesticide products, feed and fertilizer. The Dairy section provides chemical analyses in support

of regulations that pertain to the dairy industry. A description of the anal. capabilities of the following major programs will be given: Pesticide Residue Program, Pesticide Data Program, Feed, Fertilizer, Dairy & Meat Program, Monitoring and Compliance Labs., Microbiol. Data Program and the California Export Labs. Services.

L76 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:550186 CAPLUS

DOCUMENT NUMBER: 136:68957

TITLE: Residues from anabolic preparations after good veterinary practice

AUTHOR(S): Henricks, D. M.; Gray, S. L.; Owenby, J. J.; Lackey, B. R.

CORPORATE SOURCE: Department of Animal and Veterinary Sciences, Clemson University, Clemson, NC, 29634-0361, USA

SOURCE: APMIS (2001), 109(4), 273-283

CODEN: APMSEL; ISSN: 0903-4641

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The purpose of this study was to determine the endogenous concns. of estrogens, particularly 17 β -estradiol (E2 β), in edible tissues of beef cattle (females and intact and neutered males) and the concns. of E2 β , and β - and α -trenbolone (β Tb, α Tb) after an E2 β and/or trenbolone acetate (TA) ear implant. RIAs were validated for quantitation of E2 β (active isomer), E2 α , estrone (E1), β Tb and α Tb for bovine muscle, liver, kidney and fat tissues. The criteria of accuracy, precision, specificity and sensitivity were applied according to the stds. of the U.S. Food & Drug Administration. In steer tissues, endogenous E2 β was <15 ppt, as was heifer muscle, but heifer liver and kidney were 3-fold greater. An E2 β implant in steers had no effect on muscle E2 β concentration, but increased E2 β in liver and fat 4- and 3-fold, resp., but by 24 h post-implant removal, E2 β had fallen by half. Tissue E1 concns. in cyclic females were similar to E2 β , but rose many fold greater than did E2 β during gestation; E2 β rose 3-fold during gestation. After E2 β /TA implant, steer tissues had E2 β concns. equal to (for muscle and fat) and one-half (for liver) the E2 β measured in E2 β implant only steers; β Tb was in a low range (250-380 ppt) in muscle, liver and fat and α Tb was even lower, except in liver (800-1500 ppt). An implant of TA only (no E2 β) resulted in β Tb and α Tb concns. 2-3-fold greater in liver, kidney and fat, but no greater in muscle than β Tb in tissues of E2 β /TA implant steers. In conclusion, anabolic implants in steers resulted in tissue E2 β concns. less than the FDA allowable increment and β Tb in the lowest quartile (0.25) of a part per billion 30 days after implant.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:721205 CAPLUS

DOCUMENT NUMBER: 132:1102

TITLE: Elevated TCDD in chicken eggs and farm-raised catfish fed a diet with ball clay from a southern United States mine

AUTHOR(S): Hayward, Douglas G.; Nortrup, David; Gardner, Albert; Clower, Marion, Jr.

CORPORATE SOURCE: U.S. Food and Drug Administration, Washington, DC,
20204, USA
SOURCE: Environmental Research (1999), 81(3), 248-256
CODEN: ENVRAL; ISSN: 0013-9351
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The U.S. Food and Drug Administration (FDA) terminated the use of ball clay from a mine in Mississippi as an additive in animal feed after discovering nanogram per g concns. of 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD). The FDA collected chicken eggs and farm-raised catfish in affected areas and throughout the remaining continental United States to assess levels of 2,3,7,8-TCDD. A new method using quadrupole ion storage tandem-in-time mass spectrometry (QISTMS) measured the 2,3,7,8-TCDD levels in 42 catfish fillet composites, 3 Tilapia fillet composites, 46 chicken egg samples, and 6 chicken feeds. Six catfish composites and 20 egg samples had 2,3,7,8-TCDD concns. significantly above 1.0 pg/g wet weight of fillet or whole egg. Farm-raised catfish not exposed to feed containing ball clay had a mean 2,3,7,8-TCDD concentration of 0.12 pg/g. The TCDD isomer pattern in ball clay differed from the TCDD isomer pattern in a fly ash sample and from the "chick edema factor" TCDD pattern in a sample of reference toxic fat used as a feed ingredient in the 1950s. (c) 1999 Academic Press.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:143516 CAPLUS

DOCUMENT NUMBER: 126:250309

TITLE: Simplified gravimetric determination of total fat in food composites after chloroform-methanol extraction

AUTHOR(S): Phillips, Katherine M.; Tarrago-Trani, Maria Teresa; Grove, Tina M.; Grun, Ingolf; Lugogo, Rita; Harris, Robert F.; Stewart, Kent K.

CORPORATE SOURCE: Department of Biochemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA, 24061-0308, USA

SOURCE: Journal of the American Oil Chemists' Society (1997), 74(2), 137-142
CODEN: JAOCA7; ISSN: 0003-021X

PUBLISHER: AOCS Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A modification of Association of Official Anal. Chemists (AOAC) method 983.23 for the quant. determination of total lipid in food composites was evaluated for

the measurement of total fat. The procedure is based on the Bligh and Dyer chloroform/methanol total lipid extraction. Relative to AOAC 983.23, the proposed method is less labor-intensive and is applicable to batch anal. of a larger number of samples, thus reducing the cost of anal. and increasing sample throughput. Total lipid values from the proposed method are comparable to those from AOAC 983.23 and slightly higher than total fat determined by acid hydrolysis (AOAC 954.02, 945.44, or 922.06). Recoveries of standard addns. of different food-grade oils from a mixed food composite were essentially quant., ranging from 96 to 101%. Total lipid measured in Total Diet Standard Reference Material 1548 (SRM 1548, National Institute of Stds. and Technol.) was 101% of the certified

mean total fat content and within the certified range. The method is to be suitable for anal. of food composites with between 0.15 and 1.5 g total fat (3 to 30% by weight). More than 600 samples of a variety of total diet composites were collected and assayed as diet quality control samples for two National Heart, Lung and Blood Institute-sponsored multicenter clin. feeding trials: DELTA (Dietary Effects on Lipoproteins and Thrombogenic Activity) and DASH (Dietary Approaches to Stop Hypertension). The mean coefficient of variation was 1.2% for duplicate assays of these samples over the course of two years and multiple analysts. In addition, total lipid values for more than 200 samples of a diet composite quality control material, used in this laboratory over a two-year period, had a 3.99% coefficient of variation. Although the accuracy of all gravimetric total fat methods with respect to the U. S. Food and Drug Administration's Nutritional Labeling and Education Act (NLEA) definition of total fat as the sum of triglycerides remains to be determined, the reported modification of AOAC 983.23 yields a total fat content of acceptable accuracy relative to other gravimetric methods, and with proper quality control the method has excellent precision.

L76 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:580186 CAPLUS

DOCUMENT NUMBER: 123:31620

TITLE: Accumulated pesticide and industrial chemical findings from a ten-year study of ready-to-eat foods

AUTHOR(S): KAN-DO Office and Pesticides Team

CORPORATE SOURCE: U.S. Food Drug Administration, Lenexa, KS, 66285-5905, USA

SOURCE: Journal of AOAC International (1995), 78(3), 614-31
CODEN: JAINEE; ISSN: 1060-3271

PUBLISHER: AOAC International

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This report lists the pesticide and industrial chems. found in the ready-to-eat foods tested repetitively for 10 yr through the U.S. Food and Drug Administration's Revised Market Basket Study. The study operated from 1982 to 1991. During that time 37 market baskets, each containing 234 food items that represented about 5000 food types in American diets covering all age groups, including infants and children, were collected. Each food item was individually prepared for eating; i.e., it was opened, unwrapped, washed, peeled, sliced, formulated by recipe, or cooked. Each item was then composited and anal. screened for about 300 different chems., including chlorophenoxy acids, ethylenethiourea, Me carbamates, organochlorines, organophosphates, organosulfurs, phenylureas, and pyrethroids. Overall, less than 1% of the potential of 2.5 million findings occurred for the 10-yr study period. In total, 138 different chemical residues accounted for 17,050 accumulated findings. Most findings were less than 1 µg/g, which is considered a low-level finding. Each food item averaged about 2 low-level findings per anal.

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L76 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:581745 CAPLUS

DOCUMENT NUMBER: 115:181745

TITLE: Food and Drug Administration pesticide program - residues in foods - 1990

AUTHOR(S): Yess, Norma J.
 CORPORATE SOURCE: Div. Contam. Chem., Food Drug Adm., Washington, DC, 20204, USA
 SOURCE: Journal - Association of Official Analytical Chemists (1991), 74(5), 1-20, inside back cover
 CODEN: JANCA2; ISSN: 0004-5756

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Under its monitoring focused on enforcing tolerances set by the Environmental Protection Agency (EPA), FDA analyzed a total of 19,962 samples of domestically produced food from all 50 states and Puerto Rico and imported food from 92 countries. Of these, 19,146 were surveillance samples, collected with no evidence of illegal pesticide residues. No pesticide residues were found in 60% of the 8879 domestic surveillance samples and 64% of the 10,267 import surveillance samples. In an aquaculture survey, 172 samples of shell- and finfish were analyzed for some environmentally persistent pesticides. Low levels of chlorinated pesticide residues, none of which exceeded EPA tolerances or FDA action levels, were found in a number of samples. A survey of pasteurized whole milk from U.S. metropolitan areas found that residues of chlorinated pesticides were present in about 53% of the 330 samples. In a survey of processed foods, including baby foods and nuts, 3502 samples were analyzed for various pesticides. No residues were found that were over tolerance or for which there was no tolerance. In the Total Diet Study, which measures pesticide residues in foods, as consumed, 936 food items representing the diets of U.S. consumers were analyzed. Of the >200 chems. that can be determined by the anal. methods used, 51 were found in the foods analyzed. As in previous years, the levels of estimated dietary intakes of the pesticides found were generally well below established stds. The results from regulatory monitoring, incidence/level monitoring, and the Total Diet Study for 1990 agree with findings from earlier years and corroborate the continuing safety of the U.S. food supply relative to pesticide residues.

L76 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:427892 CAPLUS
 DOCUMENT NUMBER: 115:27892
 TITLE: State findings on pesticide residues in foods - 1988 and 1989
 AUTHOR(S): Minyard, James P., Jr.; Roberts, W. Edward
 CORPORATE SOURCE: Mississippi State Chem. Lab., Mississippi State Univ., Mississippi State, MS, 39762, USA
 SOURCE: Journal - Association of Official Analytical Chemists (1991), 74(3), 438-52
 CODEN: JANCA2; ISSN: 0004-5756
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Findings of pesticide and related chemical residues are presented for 27,065 samples of foods collected and analyzed in 10 state food labs. over 1988 and 1989. These labs. conduct food regulatory programs compatible with national programs of the U.S. Food and Drug Administration. Of the findings, 6325 samples contained detectable levels of 1 or more pesticide analytes and 418 (or 1.5%) of the total number of samples were deemed to be of regulatory significance.

L76 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:471137 CAPLUS
 DOCUMENT NUMBER: 97:71137

TITLE: A new synthetic food grade white oil
 AUTHOR(S): Galli, Robert D.; Cupples, B. L.; Rutherford, R. E.
 CORPORATE SOURCE: Gulf Res. Dev. Co., Pittsburgh, PA, 15230, USA
 SOURCE: Lubrication Engineering (1982), 38(6), 365-72
 CODEN: LUENAG; ISSN: 0024-7154

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A hydrogenated polyalphaolefin synthetic fluid meets all the requirements of the U.S. Food and Drug Administration (FDA) for qualification as a white mineral oil (FDA regulation 21CFR 172.878). Qualification as a white mineral oil means that the fluid may be used for incidental contact with food as specified in 21CFR 178.3620(a). The purity of the synthetic white oil is further evidenced by the absence of polynuclear aroms. and inorg. residues and by the passing of U.S. Pharmacopeia and National Formulary purity requirements for white mineral oils. This new synthetic white oil contains the branched paraffins found in conventional white oils but is free of naphthenic components. The absence of naphthenes and a more narrowly controlled mol.-weight distribution results in a better viscosity index, flash, free and pour points, and evaporation loss as compared with conventional white oils. Consequently, the synthetic white oil offers improved performance over wide temperature ranges. This synthetic white oil should be especially useful for more stringent lubrication applications which may involve incidental contact with food.

L76 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1968:437342 CAPLUS

DOCUMENT NUMBER: 69:37342

ORIGINAL REFERENCE NO.: 69:7011a,7014a

TITLE: Determination of residual bromine content on oil-producing plants fumigated by bromomethane and in the products of their processing

AUTHOR(S): Romanova, L. V.; Kukoeva, L. A.

CORPORATE SOURCE: USSR

SOURCE: Trudy, Vsesoyuznyi Nauchno-Issledovatel'skii Institut Zhirov (1967), No. 26, 65-71
 CODEN: TVZHAS; ISSN: 0372-3259

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Seed oils are fumigated with CH₃Br to prevent deterioration by parasites during transport and storage. Determination of CH₃Br and free Br remaining in the seeds and oil after degassing is necessary. The method of Recvers, d'Aquin, and Philips (1947) was checked for a series of seeds and oils, and a detailed course of anal. is described. The weighed oil or pulverized seed is allowed to stand overnight in an alc. KOH solution; after evaporation of the alc., the residue is incinerated, the ash extracted with H₂O, and the extract filtered; 3 combined exts. are evaporated to dryness, acidified with H₂SO₄, and the liberated Br is transferred by aspiration, in a special apparatus, to a KI solution, where the equivalent amount of I is titrated. The residual Br contents depend on the time of fumigation and the amount of CH₃Br utilized. The maximum permissible Br concentration in U.S. food was in no case attained. A small quantity of Br was found in unfumigated seeds (1.1-1.7) and oils (0.6-1.4 mg./kg. product).

L76 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1967:105966 CAPLUS

DOCUMENT NUMBER: 66:105966
ORIGINAL REFERENCE NO.: 66:19855a,19858a
TITLE: Internal coatings for cans for foods. Determination of extractables
AUTHOR(S): Codoni, M. R.; Formichelli, A. R.; Maguid, A.
SOURCE: Revista de la Facultad de Ingenieria Quimica (Universidad Nacional del Litoral) (1965), Volume Date 1964-1965, 33-34, 271-80
CODEN: RFIQA6; ISSN: 0376-0456

DOCUMENT TYPE: Journal
LANGUAGE: Spanish

AB Argentina's federal and Santa Fe province's regulations, Latin American Code, and U.S. Food and Drug Administration (F.D.A.) specifications are reviewed. B-62, a locally used oil-rosin coating used for F.D.A. Class II foods, and B-63, a locally used ZnO-containing oil-rosin coating used for F.D.A. Class III foods, were extracted with water and heptane, following F.D.A. procedures. Total and CHCl₃-soluble extractable residues were reported. Cans were totally covered. In all cases, the amts. of extractables were lower than the maximum allowable.

L76 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1966:424258 CAPLUS
DOCUMENT NUMBER: 65:24258
ORIGINAL REFERENCE NO.: 65:4528h,4529a-b
TITLE: Study of pesticide residues in agricultural products

AUTHOR(S): Salazar de Buckle, Teresa; Rozo, Manuel; Cardenas, Olga Sofia

CORPORATE SOURCE: Inst. Tech. Res., Bogota, Colombia

SOURCE: Tecnologia (1966), 8(39), 11-22

DOCUMENT TYPE: Journal

LANGUAGE: Spanish

AB The study included (a) information on pesticides used, doses, fumigation frequency, crops, cultivated areas, and climatic conditions; (b) sampling of the products (68 samples total); and (c) determination of the residual toxicity and concentration of the pesticide applied in products most frequently consumed.

Biol. mortality tests were done with *Drosophila melanogaster*, *Musca domestica*, and larvae of *Aedes aegypti*. For mortality tests on tomato samples, the flies were exposed to a dried film obtained by evaporation of an extract of the material studied. Controls were prepared with greenhouse fruits with no pesticide applied. Fifty flies, 12 days old, were used for each test, and mortality percentage was calculated after 24 hrs. The residues were investigated by thin-layer chromatography. In 11 of 16 areas, 50% parathion was used as pesticide, alone or mixed with fungicides of the Dithane and Manzate type. Other insecticides were Sevin, aldrin, DDT, and lindane. The residues were extracted with C₆H₅ (96% recovery), and then the exts. were dried at 20-3° (1 hr.) for mortality tests. Exts. for chromatography were liberated from pigments, fats, and waxes by using active C treatment. Parathion residues between 0.04 and 0.5 ppm. were found. The tolerance limit is 1 ppm. according to the U.S. Food and Drug Administration for tomatoes; low concns. were found in spite of the fact that fruits were not washed before being sent to the market.

L76 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1965:94097 CAPLUS
 DOCUMENT NUMBER: 62:94097
 ORIGINAL REFERENCE NO.: 62:16874g
 TITLE: Food additives. Defoaming agents used in coatings
 AUTHOR(S): Anon.
 SOURCE: Federal Register (1965), 30, 4535-6, 8 Apr 1965
 CODEN: FEREC; ISSN: 0097-6326

DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

AB cf. CA 60, 1035c. The previous regulation under the Federal Food, Drug, and Cosmetic Act is revised to provide for the use of the following addnl. substances in the production of defoaming agents used in food-contact coatings: dimers and trimers of unsatd. C18 fatty acids derived from animal and vegetable fats and oils at a maximum level of 0.1% of coating solids; tall oil; and polysorbate 60.

L76 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1921:10435 CAPLUS
 DOCUMENT NUMBER: 15:10435
 ORIGINAL REFERENCE NO.: 15:1952h-i,1953a
 TITLE: The industrial preparation and filtration of colloidal solutions and masses
 AUTHOR(S): Frydlander, J. H.
 SOURCE: Revue des Produits Chimiques (1921), 24, 173-82
 CODEN: RPRCAB; ISSN: 0370-6796

DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

AB The main principles of colloidal chemistry are very briefly reviewed. Plauson and Block's "colloidogenetic" mill is described, together with its application to the industries of petroleum, shale oil, press cake, fuller's earth, decolorizing charcoal, resins, fuel (liquid coal), graphitic lubricants, plastics, artificial silk, cellulose esters, saccharification of cellulose, pigments, phosphate fertilizers, hydrogenation of oils, soap, lignite refining, extraction of lignite wax, artificial milk, extraction of glue from waste materials, starch, Hg, I, colloidal S, foods, ultramarine, and rubber reclaiming. Plauson's method of ultrafiltration (See Schmitt, C. A. 14, 3763) is described, and mention is made of its applications in the industries of ceramics, mineral pigments, water purification and sterilization, coloring matters, varnish, sugar, mineral oils and tar, animal and vegetable oils, and dust prevention.

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FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
 L2 140 S CANDLE WAX
 L3 108 S CANDLE (4W) MATERIAL
 L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE

L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMINUT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5
 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46
 L50 134369 S HYDROGENATE?
 L51 2691 S L5 AND L7
 L52 107 S L50 AND L51
 L53 1 S L52 AND L22
 L54 10641 S L7 AND COOKING
 L55 499 S L54 AND L50
 L56 4 S L55 AND L5
 L57 4943 S L7 AND L14
 L58 413 S L57 AND L33
 L59 13 S L58 AND L30
 L60 0 S L58 AND L29
 L61 578 S L14 AND L33
 L62 0 S L61 AND L29
 L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5
 L66 2927 S L30 AND L5

L67 56 S L66 AND SEPARATE
 L68 2 S L67 AND L50
 L69 160 S RECYCLED (4W) FOOD
 L70 20 S L69 AND L7
 L71 0 S L70 AND SEPARARATE
 L72 0 S L70 AND L43
 L73 0 S L70 AND L45
 L74 1332 S S FOOD
 L75 144 S L74 AND L33
 L76 16 S L75 AND L7

=> s l74 and recycle?
 92786 RECYCLE?
 L77 5 L74 AND RECYCLE?

=> d l77 1-5 ibib abs

L77 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:178625 CAPLUS
 TITLE: Plant metabolic engineering: Entering the S curve
 AUTHOR(S): Shanks, Jacqueline V.
 CORPORATE SOURCE: Department of Chemical Engineering, Iowa State University, Ames, IA, 50011, USA
 SOURCE: Abstracts of Papers, 225th ACS National Meeting, New Orleans, LA, United States, March 23-27, 2003 (2003), AGFD-112. American Chemical Society: Washington, D. C.
 CODEN: 69DSA4
 DOCUMENT TYPE: Conference; Meeting Abstract
 LANGUAGE: English
 AB Plants are wonderful living entities that recycle carbon dioxide in the atmospheric into valuable products that benefit humanity. These products can be categorized into the six F's: Food for humans; Feed for animals; Fiber; Fuel; Pharmaceuticals; and Feedstocks in the chemical industry. This talk will highlight the tech. aspects in the progress, problems, and prospects of plant metabolic engineering as applied to the six F's.

L77 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:738882 CAPLUS
 DOCUMENT NUMBER: 137:234199
 TITLE: Overview of the Recycled Paperboard Technical Association (RPTA) chemical testing protocol for food-contact paperboard made from recycled fiber
 AUTHOR(S): Hagenbarth, Michael J.; Kaziukewicz, Gary
 CORPORATE SOURCE: Rock-Tenn Company, Norcross, GA, USA
 SOURCE: Revue ATIP (2002), 56(3), 26-32
 CODEN: ATIPBH; ISSN: 0997-7554
 PUBLISHER: Association Technique de l'Industrie Papetiere
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English
 AB A review. The Recycled Paperboard Tech. Association (RPTA) sponsored the preparation of a sampling and anal. protocol that RPTA member mills can use to determine that paperboard produced from recycled fiber may safely be used in food contact applications and help ensure compliance with the U.S. Food and Drug Administration

("FDA") regulations outlined in 21 CFR 176.260. Maximum estimated allowable concentration values for the potential unintentional chemical constituents in the

paperboard have been calculated, based on migration adjustments. These calcs. take into consideration standard FDA dietary intake assumptions, migration factors for both aqueous and fatty foods, and toxicity reference values.

The subjects of this paper include how and why the RPTA Protocol was developed, how it is used today, and what changes may be expected in the future.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:193312 CAPLUS

DOCUMENT NUMBER: 135:19072

TITLE: Feasibility of substituting sodium for potassium in crop plants for advanced life support systems

AUTHOR(S): Subbarao, Guntur V.; Wheeler, Raymond M.; Stutte, Gary W.

CORPORATE SOURCE: Kennedy Space Center, US National Research Council, FL, 32899, USA

SOURCE: Life Support & Biosphere Science (2000), 7(3), 225-232
CODEN: LSBSF7; ISSN: 1069-9422

PUBLISHER: Cognizant Communication Corp.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Recycling of nutrients, air, and water is an integral feature of life support systems designed for long-term space missions. Plants can play a major role in supplying the basic life support requirements, which include providing the crew's food, clean water, and air, and recycling their wastes. The nutrient flux through the plant and human systems needs to be matched in order for nutrients to recycle between humans and plants without an excessive buildup in any one section of the system. Sodium, which is essential at the macronutrient level for human metabolism, has only been shown to be a micronutrient for some plants, with only very limited uptake in most plants. Thus, when Na is added from the outside to meet the human demand in these closed life support systems it will accumulate someplace in the overall system. In simple systems such as these, without a complete biogeol. cycle, the buildup of Na could occur in the nutrient solution of the plant system. Various concepts related to the substitution of sodium for potassium in crop plants are currently being investigated by NASA. Results to date suggest that Na concns. up to 100 g kg⁻¹ dry weight may be achievable in the edible portions of Na-tolerant crops (e.g., red beet and chard). A flow path for nutrient solution high in Na wastes has been suggested for optimizing Na and nitrogen incorporation and utilization from such solns. Options for further improvements include selecting plant genotypes tolerant to high salinity, which are efficient in Na uptake. This should also be combined with environmental manipulations to maximize Na uptake by crop plants.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:762522 CAPLUS

DOCUMENT NUMBER: 134:55643

TITLE: Analytical Procedure for Quantifying Five Compounds Suspected as Possible Contaminants in Recycled

Paper/Paperboard for Food Packaging
 AUTHOR(S): Song, Yoon S.; Park, Hong J.; Komolprasert, Vanee
 CORPORATE SOURCE: Division of Food Processing and Packaging, U.S. Food
 and Drug Administration National Center for Food
 Safety and Technology, Summit-Argo, IL, 60501, USA
 SOURCE: Journal of Agricultural and Food Chemistry (2000),
 48(12), 5856-5859
 CODEN: JAFCAU; ISSN: 0021-8561
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Because contaminants in recycled paper intended for food
 packaging could be a risk to public health, anal. methods are needed to
 identify and quantify residues of concern in paper/paperboard. The U.
 S. Food and Drug Administration is considering
 development of a guidance document for testing levels of contaminants that
 might be retained through paper recycling processes. An anal. procedure
 was developed using paper spiked with suspected contaminants at 1-50 ppm
 in the paper. Benzophenone, di-Me phthalate, anthracene, Me stearate, and
 pentachlorophenol were introduced by soaking the paper in a solution in
 acetone at 25 °C for 24 h; the paper was removed and dried by
 evaporating the solvent with nitrogen. The model contaminant residues were
 extracted from the paper using ultrasonication and quantified by GC with flame
 ionization and electron capture detectors. Recoveries from the spiked
 paper were 80-109% with a repeatability of ±4%. The method was also
 used to analyze com. recycled paperboard to validate its
 applicability.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1999:110986 CAPLUS
 DOCUMENT NUMBER: 130:226995
 TITLE: Using plants to purify wastewater
 AUTHOR(S): Riggle, David; Gray, Kevin
 CORPORATE SOURCE: USA
 SOURCE: BioCycle (1999), 40(1), 40, 42
 CODEN: BCYCDK; ISSN: 0276-5055
 PUBLISHER: JG Press, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Domestic wastewater is being treated in natural systems using tanks,
 biofilters, and greenhouses along with bacteria, algae, plants, and fish.
 The treated water is pure enough to be discharged directly into rivers or
 to be recycled. Living Machine Systems, com. developed by
 Living Technologies, Burlington, Vermont, are involved primarily in
 treating wastewater and high-strength organic wastes; many systems are zero
 discharge, a trend being promoted. Plants having very rapid growth rates,
 have high root surface area for bacterial growth, and which take up N and
 P are selected. The system's food web crustaceans,
 rotifers, and stalked ciliates digest free-living bacteria, greatly
 reducing the pathogen load. Design, operation, and performance data from
 Living Machine Systems in New Lebanon, New York, and the Findhorn
 Foundation in Scotland, are discussed in detail.

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
L2 140 S CANDLE WAX
L3 108 S CANDLE (4W) MATERIAL
L4 3048 S FOOD (4W) RESIDUE
L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6 0 S L4 AND L5
L7 1119609 S (FAT# OR OIL#)
L8 203 S COOKING (3W) RESIDUE
L9 49 S L8 AND L7
L10 0 S L9 AND L5
L11 272 S COOKING (3W) WASTE
L12 0 S L11 AND L5
L13 0 S L12 AND L7
L14 7445 S FRYING
L15 4943 S L14 AND L7
L16 42 S L15 AND L5
L17 0 S L16 AND L1
L18 0 S L16 AND WAX
L19 0 S L16 AND L3
L20 25 S L7 AND L3
L21 0 S L20 AND L5
L22 105455 S WAX
L23 273 S L22 AND L5
L24 0 S L23 AND L14
L25 4943 S L14 AND L7
L26 195 S L25 AND RESIDUE
L27 0 S L26 AND L5
L28 2 S L1 AND L5
L29 54685 S DEHYDROGENAT?
L30 216440 S LIPIDS
L31 94 S L29 AND L30
L32 1 S L31 AND L5
L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
L34 118649 S L33 AND L7
L35 2957 S L34 AND L22
L36 12 S L35 AND L1
L37 12263 S COMMINUT?
L38 1 S L37 AND L4
L39 277 S GROUND (5W) FOOD
L40 6 S L39 AND L30
L41 0 S L40 AND L29
L42 3 S L29 AND L5
L43 540881 S EXTRACT
L44 10010 S L43 AND L30
L45 2300 S ANIMAL (3W) MATERIAL
L46 5821 S VEGETABLE (3W) MATERIAL
L47 0 S L44 AND L45 AND L46
L48 8 S L45 AND L44
L49 8 S L44 AND L46
L50 134369 S HYDROGENATE?
L51 2691 S L5 AND L7
L52 107 S L50 AND L51
L53 1 S L52 AND L22
L54 10641 S L7 AND COOKING
L55 499 S L54 AND L50

L56 4 S L55 AND L5
 L57 4943 S L7 AND L14
 L58 413 S L57 AND L33
 L59 13 S L58 AND L30
 L60 0 S L58 AND L29
 L61 578 S L14 AND L33
 L62 0 S L61 AND L29
 L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5
 L66 2927 S L30 AND L5
 L67 56 S L66 AND SEPARATE
 L68 2 S L67 AND L50
 L69 160 S RECYCLED (4W) FOOD
 L70 20 S L69 AND L7
 L71 0 S L70 AND SEPARARATE
 L72 0 S L70 AND L43
 L73 0 S L70 AND L45
 L74 1332 S S FOOD
 L75 144 S L74 AND L33
 L76 16 S L75 AND L7
 L77 5 S L74 AND RECYCLE?

=> file uspatfull
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
374.43	374.64

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-64.74	-64.74

CA SUBSCRIBER PRICE

FILE 'USPATFULL' ENTERED AT 12:59:04 ON 23 NOV 2007
 CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Nov 2007 (20071122/PD)
 FILE LAST UPDATED: 22 Nov 2007 (20071122/ED)
 HIGHEST GRANTED PATENT NUMBER: US7299504
 HIGHEST APPLICATION PUBLICATION NUMBER: US2007271667
 CA INDEXING IS CURRENT THROUGH 22 Nov 2007 (20071122/UPCA)
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Nov 2007 (20071122/PD)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2007
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2007

=> s food

233045 FOOD
 58850 FOODS
 L78 246712 FOOD
 (FOOD OR FOODS)

=> s wax

118584 WAX
 71969 WAXES
 L79 154006 WAX
 (WAX OR WAXES)

=> s 178 and 179

L80 27252 L78 AND L79

=> s residue

357899 RESIDUE
186826 RESIDUES

L81 426843 RESIDUE
(RESIDUE OR RESIDUES)

=> s l81 and l80

L82 11806 L81 AND L80

=> s l82 and l5

17 TRICLYCERIDE
17 TRICLYCERIDES
32 TRICLYCERIDE
(TRICLYCERIDE OR TRICLYCERIDES)

1252 TRIACYLGLYCEROLS
L83 136 L82 AND L5

=> s l83 and material

2651774 MATERIAL
1715901 MATERIALS
2890546 MATERIAL
(MATERIAL OR MATERIALS)

L84 128 L83 AND MATERIAL

=> s l84 and process

2600338 PROCESS
1221218 PROCESSES
2734705 PROCESS
(PROCESS OR PROCESSES)

L85 118 L84 AND PROCESS

=> s esterir?

L86 4 ESTERIR?

=> s esterif?

L87 91988 ESTERIF?

=> s l87 and l85

L88 53 L87 AND L85

=> s l88 and l1

11993 CANDLE?
L89 5 L88 AND L1

=> d l89 1-5 ibib abs

L89 ANSWER 1 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2007:136231 USPATFULL

TITLE: Process for the production of fine chemicals

INVENTOR(S): Puzio, Piotr, Berlin, GERMANY, FEDERAL REPUBLIC OF
Wendel, Birgit, Berlin, GERMANY, FEDERAL REPUBLIC OF
Herold, Michael Manfred, Berlin, GERMANY, FEDERAL
REPUBLIC OF

Looser, Ralf, Berlin, GERMANY, FEDERAL REPUBLIC OF
Blau, Astrid, Stahnsdorf, GERMANY, FEDERAL REPUBLIC OF
Plesch, Gunnar, Potsdam, GERMANY, FEDERAL REPUBLIC OF

Serial N 10/565361

Kamlage, Beate, Berlin, GERMANY, FEDERAL REPUBLIC OF
Schauwecker, Florian, Berlin, GERMANY, FEDERAL REPUBLIC
OF

PATENT ASSIGNEE(S): Metanomics GmbH, Berlin, GERMANY, FEDERAL REPUBLIC OF
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007118916	A1	20070524
APPLICATION INFO.:	US 2006-516230	A1	20060906 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2006-110426	20060224
	EP 2006-110579	20060228
	EP 2006-110425	20060224
	EP 2006-110423	20060224
	EP 2006-110418	20060224
	EP 2006-110383	20060224
	EP 2006-110378	20060224
	EP 2006-110367	20060224
	EP 2006-110327	20060223
	EP 2006-110325	20060223
	EP 2006-110959	20060224
	EP 2006-110289	20060222
	EP 2006-110005	20060216
	EP 2006-110215	20060221
	EP 2006-110211	20060214
	EP 2006-110968	20060217
	EP 2006-101589	20060207
	EP 2005-113027	20051222
	EP 2005-112431	20051215
	EP 2005-112039	20051212
	EP 2005-111910	20051201
	EP 2005-111170	20051117
	EP 2005-110441	20051108
	EP 2005-110433	20051107
	EP 2005-109592	20051014

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Connolly Bove Lodge & Hutz LLP, 1007 North Orange
Street, P.O. Box 2207, Wilmington, DE, 19899, US

NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 80479

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a process for the production
of the fine chemical in a microorganism, a plant cell, a plant, a plant
tissue or in one or more parts thereof, preferably in plastids. The
invention furthermore relates to nucleic acid molecules, polypeptides,
nucleic acid constructs, vectors, antibodies, host cells, plant tissue,
propagation material, harvested material, plants,
microorganisms as well as agricultural compositions and to their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L89 ANSWER 2 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2006:301624 USPATFULL
 TITLE: Method for producing fats or oils
 INVENTOR(S): Binder, Thomas P., Decatur, IL, UNITED STATES
 Bloomer, Scott, Decatur, IL, UNITED STATES
 Lee, Inmok, Decatur, IL, UNITED STATES
 Solheim, Leif, Decatur, IL, UNITED STATES
 Wicklund, Lori E., Argenta, IL, UNITED STATES
 PATENT ASSIGNEE(S): Archer-Daniels-Midland Company, Decatur, IL, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006257982	A1	20061116
APPLICATION INFO.:	US 2006-432494	A1	20060512 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-680483P	20050513 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., WASHINGTON, DC, 20005, US	
NUMBER OF CLAIMS:	30	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	1954	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to improving productivity of an enzymatic method for producing esterified, transesterified or interesterified fats or oils. Specifically, a method that can greatly improve the productivity of enzymatic esterification, transesterification or interesterification by purifying the substrate oil to extend the useful life of the enzyme is disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L89 ANSWER 3 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2006:166951 USPATFULL
 TITLE: Acyltransferase
 INVENTOR(S): Lindqvist, Ylva, Jarfalla, SWEDEN
 Banas, Antoni, Siedlce, SWEDEN
 Dahlqvist, Anders, Furulund, SWEDEN
 Ghosal, Alokesh, Calcutta, INDIA
 PATENT ASSIGNEE(S): SCANDINAVIAN BIOTECHNOLOGY RESEARCH (ScanBi) AB,
 Alnarp, SWEDEN, S-230 53 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006141457	A1	20060629
APPLICATION INFO.:	US 2003-516094	A1	20030528 (10)
	WO 2003-SE870		20030528
			20041124 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	SE 2002-1581	20020529
	SE 2003-142	20030120
	US 2002-383889P	20020529 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN,
55402-0903, US
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2623
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to at least one nucleotide sequence, derived from a nucleotide sequence encoding an acyltransferase polypeptide comprising at least one membrane-spanning region, encoding an improved active membrane independent acyltransferase polypeptide in which at least one amino acid residue of the membrane-spanning region has been deleted and/or substituted as compared to the original acyltransferase polypeptide, wherein the encoded active membrane independent acyltransferase polypeptide can produce fatty acid esters and/or fatty acid thioesters such as triacylglycerols, diacylglycerols, monoacylglycerols, phospholipids, glycolipids, waxesters, acylated carbohydrates, acylated amino acids, and lysolipids, e.g. lysophospholipid, lysolecithin. Thereby one single acyltransferase can be used for the production of a huge number of products. The invention also relates to means and methods for the production of such an improved active membrane independent acyltransferase and the use of such a membrane independent acyltransferase in industry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L89 ANSWER 4 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2004:63368 USPATFULL
TITLE: Triacylglycerol-based alternative to paraffin wax
INVENTOR(S): Murphy, Timothy A., Derby, KS, UNITED STATES
Doucette, Melinda Kae, Wichita, KS, UNITED STATES
House, Nathaniel C., III, Fayetteville, NC, UNITED STATES
Richards, Michael L., West Branch, IA, UNITED STATES
PATENT ASSIGNEE(S): Cargill, Incorporated (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004047886	A1	20040311
	US 7217301	B2	20070515
APPLICATION INFO.:	US 2003-655945	A1	20030905 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-877716, filed on 8 Jun 2001, GRANTED, Pat. No. US 6645261 Continuation-in-part of Ser. No. US 2000-519812, filed on 6 Mar 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-543929, filed on 6 Apr 2000, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Daniel J. Enebo, Cargill, Incorporated, P.O. Box 5624, Minneapolis, MN, 55440-5624		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
LINE COUNT:	905		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A triacylglycerol-based wax, which can be used in

candle making, is provided. The triacylglycerol-based material is predominantly includes a triacylglycerol stock which has a fatty acid profile has no more than about 25 weight % fatty acids having less than 18 carbon atoms. In addition, the fatty acid profile of the triacylglycerol typically includes at least about 50 weight % 18:1 fatty acid and no more than about 25 weight % 18:0 fatty acid. In another embodiment, the triacylglycerol-based material is characterized in part by an Iodine Value of about 60 to about 75. For applications such as candles, the wax commonly includes a hydrogenated vegetable oil and palmitic acid. Candles formed from triacylglycerol-based material and methods of producing the candles are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L89 ANSWER 5 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2002:284487 USPATFULL

TITLE: Triacylglycerol-based alternative to paraffin wax

INVENTOR(S): Murphy, Timothy A., Derby, KS, UNITED STATES
 Doucette, Melinda Kae, Wichita, KS, UNITED STATES
 House, Nathaniel C., III, Fayetteville, NC, UNITED STATES
 Richards, Michael L., Cedar Rapids, IA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002157303	A1	20021031
	US 6645261	B2	20031111
APPLICATION INFO.:	US 2001-877716	A1	20010608 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-519812, filed on 6 Mar 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-543929, filed on 6 Apr 2000, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Charles G. Carter, FOLEY & LARDNER, Firststar Center, 777 East Wisconsin Avenue, Milwaukee, WI, 53202-5367		
NUMBER OF CLAIMS:	39		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1039		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A triacylglycerol-based wax, which can be used in candle making, is provided. The triacylglycerol-based material is predominantly includes a triacylglycerol stock which has a fatty acid profile has no more than about 25 weight % fatty acids having less than 18 carbon atoms. In addition, the fatty acid profile of the triacylglycerol typically includes at least about 50 weight % 18:1 fatty acid and no more than about 25 weight % 18:0 fatty acid. In another embodiment, the triacylglycerol-based material is characterized in part by an Iodine Value of about 60 to 75. For applications such as candles, the wax commonly includes a hydrogenated vegetable oil and palmitic acid. Candles formed from triacylglycerol-based material and methods of producing the candles are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Serial N 10/565361

=> file beilstein
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
27.64	402.28

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-64.74

CA SUBSCRIBER PRICE

FILE 'BEILSTEIN' ENTERED AT 13:06:11 ON 23 NOV 2007

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FILE LAST UPDATED ON September 26, 2007

FILE COVERS 1771 TO 2007.

*** FILE CONTAINS 10.119,480 SUBSTANCES ***

>>>PLEASE NOTE: Reaction Data and substance data are stored in
separate documents and can not be searched together in one query.
Reaction data for BEILSTEIN compounds may be displayed
immediately with the display codes PRE (preparations) and REA
(reactions). A substance answer set retrieved after the search
for a chemical name, a compounds with available reaction
information by combining with PRE/FA, REA/FA or more generally
with RX/FA. The BEILSTEIN Registry Number (BRN) is the link
between a BEILSTEIN compound and belonging reactions. For mo
detailed reaction searches BRNs can be searched as reaction
partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST. *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
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NEW

* PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE
SEARCHED, SELECTED AND TRANSFERRED.
* NEW DISPLAY FORMATS. ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES,
ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A
COMPOUND AT A GLANCE.

=> d his

(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1	5464 S CANDLE?
L2	140 S CANDLE WAX
L3	108 S CANDLE (4W) MATERIAL
L4	3048 S FOOD (4W) RESIDUE
L5	6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
L6	0 S L4 AND L5
L7	1119609 S (FAT# OR OIL#)

L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30
 L32 1 S L31 AND L5
 L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
 L34 118649 S L33 AND L7
 L35 2957 S L34 AND L22
 L36 12 S L35 AND L1
 L37 12263 S COMMINUT?
 L38 1 S L37 AND L4
 L39 277 S GROUND (5W) FOOD
 L40 6 S L39 AND L30
 L41 0 S L40 AND L29
 L42 3 S L29 AND L5
 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46
 L50 134369 S HYDROGENATE?
 L51 2691 S L5 AND L7
 L52 107 S L50 AND L51
 L53 1 S L52 AND L22
 L54 10641 S L7 AND COOKING
 L55 499 S L54 AND L50
 L56 4 S L55 AND L5
 L57 4943 S L7 AND L14
 L58 413 S L57 AND L33
 L59 13 S L58 AND L30
 L60 0 S L58 AND L29
 L61 578 S L14 AND L33
 L62 0 S L61 AND L29
 L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5

L66 2927 S L30 AND L5
 L67 56 S L66 AND SEPARATE
 L68 2 S L67 AND L50
 L69 160 S RECYCLED (4W) FOOD
 L70 20 S L69 AND L7
 L71 0 S L70 AND SEPARARATE
 L72 0 S L70 AND L43
 L73 0 S L70 AND L45
 L74 1332 S S FOOD
 L75 144 S L74 AND L33
 L76 16 S L75 AND L7
 L77 5 S L74 AND RECYCLE?

FILE 'USPATFULL' ENTERED AT 12:59:04 ON 23 NOV 2007

L78 246712 S FOOD
 L79 154006 S WAX
 L80 27252 S L78 AND L79
 L81 426843 S RESIDUE
 L82 11806 S L81 AND L80
 L83 136 S L82 AND L5
 L84 128 S L83 AND MATERIAL
 L85 118 S L84 AND PROCESS
 L86 4 S ESTERIR?
 L87 91988 S ESTERIF?
 L88 53 S L87 AND L85
 L89 5 S L88 AND L1

FILE 'BEILSTEIN' ENTERED AT 13:06:11 ON 23 NOV 2007

=> s food

72 FOOD
 13 FOODS
 L90 85 FOOD
 (FOOD OR FOODS)

=> s candle

L91 2 CANDLE

=> s 190 and 191

L92 0 L90 AND L91

=> s wax

179 WAX
 5 WAXES
 L93 184 WAX
 (WAX OR WAXES)

=> s 193 and 15

0 TRICLYCERIDE
 2 TRIACYLGLYCEROLS
 L94 0 L93 AND L5

=> s triglycerides or triacylglycerols

16 TRIGLYCERIDES
 2 TRIACYLGLYCEROLS
 L95 18 TRIGLYCERIDES OR TRIACYLGLYCEROLS

=> s 195 and 193

L96 0 L95 AND L93

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.30

402.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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-64.74

FILE 'CAPLUS' ENTERED AT 13:08:55 ON 23 NOV 2007

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FILE COVERS 1907 - 23 Nov 2007 VOL 147 ISS 23

FILE LAST UPDATED: 22 Nov 2007 (20071122/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s triglycerides or triacylglycerols

41563 TRIGLYCERIDES

6090 TRIACYLGLYCEROLS

L97 47185 TRIGLYCERIDES OR TRIACYLGLYCEROLS

=> d his

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L90 85 S FOOD
 L91 2 S CANDLE
 L92 0 S L90 AND L91
 L93 184 S WAX
 L94 0 S L93 AND L5
 L95 18 S TRIGLYCERIDES OR TRIACYLGLYCEROLS
 L96 0 S L95 AND L93

FILE 'CAPLUS' ENTERED AT 13:08:55 ON 23 NOV 2007

L97 47185 S TRIGLYCERIDES OR TRIACYLGLYCEROLS

=> s 197 and l1

L98 13 L97 AND L1

=> s 197 and wax

84138 WAX

58426 WAXES

105455 WAX

(WAX OR WAXES).

L99 1233 L97 AND WAX

=> s 199 and l7

L100 579 L99 AND L7

=> s 100 and l29

154 L00

L101 0 L00 AND L29

=> d 198 1-7 ibib abs

L98 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:492428 CAPLUS

DOCUMENT NUMBER: 144:490621

TITLE: Mixtures for candles manufacturing.

PATENT ASSIGNEE(S): Wachs- Und Ceresin-Fabriken Th. C. Tromm GmbH, Germany

SOURCE: Ger. Gebrauchsmusterschrift, 5 pp.

CODEN: GGXXFR
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 202006001975	U1	20060524	DE 2006-202006001975	20060208
PRIORITY APPLN. INFO.:			DE 2006-202006001975	20060208

AB A mixture for candles manufacture comprises 1 - 5 weight% solid paraffins having m. p. 70° - 130° and ≥ 95 weight% rape oil-based waxes containing ≥50 weight% triglycerides. Thus, a composition containing 97.5 weight% rape oil-based waxes (Polycerin 9516) and 2.5 weight% solid paraffins (Vestowax H 200) was melted at 90 - 125° and formed to make 8 cm length candles having diameter 4 cm.

L98 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2005:99588 CAPLUS
 DOCUMENT NUMBER: 142:179255
 TITLE: Method for production of raw materials for candle production and a heat store material
 INVENTOR(S): Tischendorf, Dieter
 PATENT ASSIGNEE(S): Germany
 SOURCE: PCT Int. Appl., 24 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005010135	A1	20050203	WO 2004-EP8269	20040723
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1648987	A1	20060426	EP 2004-763445	20040723
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1829789	A	20060906	CN 2004-80021478	20040723
US 2006211875	A1	20060921	US 2006-565361	20060123
PRIORITY APPLN. INFO.:			DE 2003-10333862	A 20030724
			WO 2004-EP8269	W 20040723

AB A method for production of raw materials for candle production and a heat store material (waxes), whereby lipids are extracted, refined and/or hydrogenated from a lipid containing material, such as mixts. of food wastes, used cooking oils and fats, materials from food industry, and/or animal fats, comprises (a) washing and crushing, (b) isolating the lipids, and (c), optionally, subsequent esterification, refining, and/or hydrogenation

(under pressure; using Ni- or Pt-catalysts). Preferably, after step a, the starting material is dehydrogenated and sterilized at 353-453 K. Mineral oils and fats and/or hydrocarbons are added to the mixture of lipid-containing organic materials of animal and vegetable origin. Before the lipids are reacted to triglycerides, free fatty acids are removed by extraction. Finally, perfumes and/or pigments are admixed.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L98 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:964402 CAPLUS

DOCUMENT NUMBER: 141:397979

TITLE: Wax and wax-based products

INVENTOR(S): Murphy, Timothy A.; Shepherd, Michael D.

PATENT ASSIGNEE(S): Cargill, Incorporated, USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004221503	A1	20041111	US 2003-434447	20030508
US 7192457	B2	20070320		
CA 2525088	A1	20041125	CA 2004-2525088	20040506
WO 2004101720	A1	20041125	WO 2004-US14090	20040506

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1620533	A1	20060201	EP 2004-760892	20040506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				

US 2006272200	A1	20061207	US 2006-502977	20060811
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PRIORITY APPLN. INFO.:			US 2003-434447	A 20030508
			WO 2004-US14090	W 20040506

AB The present lipid-based wax compns. commonly include a polyol fatty acid ester component (made up of partial and/or completely esterified polyols). Generally, at least a portion of the polyol fatty acid ester was subjected to a transesterification reaction. Lipid-based wax compns. having a m.p. of .apprx.48°. to .apprx.75°. can be particularly advantageous for use in forming candles. The wax may contain other components such as mineral wax, plant wax, insect wax, and/or other components. The polyol fatty acid ester component can include triacylglycerols such as those derived from plant oils (soybean oil, palm oil, etc.). The polyol ester component may be characterized based on one or more of its phys. characteristics, such as SFI-40, SFI-10, typical crystal structure, IV, melting curve, and/or other properties.

REFERENCE COUNT: 95 THERE ARE 95 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L98 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:58683 CAPLUS
 DOCUMENT NUMBER: 138:124204
 TITLE: Vegetable oil-based wax compositions from
 triglycerides and fatty acids
 INVENTOR(S): Murphy, Timothy A.
 PATENT ASSIGNEE(S): Cargill, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003017431	A1	20030123	US 2002-92341	20020305
US 6824572	B2	20041130		

PRIORITY APPLN. INFO.: US 2001-273647P P 20010306

AB Candles formed from vegetable oil-based wax are provided. The wax includes a triacylglycerol component and a fatty acid component, preferably .apprx.50 to 65% of the triacylglycerol component and .apprx.35 to 50% of the fatty acid component. The fatty acid component commonly includes at least .apprx.90% palmitic acid and stearic acids. The triacylglycerol component may have a m.p. of .apprx.57° to .apprx.63° and/or an Iodine Value of .apprx.35 to .apprx.45. Methods of producing the candles from the vegetable oil-based wax are also provided.

REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L98 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:778371 CAPLUS
 DOCUMENT NUMBER: 137:281658
 TITLE: Non-sooting candles fabricated from paraffin
 waxes and saturated fatty alcohols, fatty acids, and
 triglycerides
 INVENTOR(S): Bertrand, Jerome C.; Adams, Charles Sullivan;
 Phillips, Brian Charles
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U.S.
 Ser. No. 755,644.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002144455	A1	20021010	US 2001-36825	20011108
US 2002005007	A1	20020117	US 2001-755644	20010106
US 6758869	B2	20040706		

PRIORITY APPLN. INFO.: US 2001-755644 A2 20010106
 US 2000-179767P P 20000202
 US 2000-670181 A 20000926

AB Soot-free candles contain one or more fatty materials (e.g., saturated (C12-18) fatty alcs., free saturated fatty acids, and/or saturated triglycerides, as well as paraffin waxes, all with a low iodine number (.1torsim.12.5, preferably <1)). The candles can contain substantially no paraffins, or can contain 30-90 weight% paraffin waxes. The use of low-iodine-number long-chain compds. and in the proper component percentages results in low-soot or soot-free compns. that can be blended with paraffins, if desired, to create very stable, non-sooting or low-sooting candles.

L98 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:51827 CAPLUS
 DOCUMENT NUMBER: 136:120914
 TITLE: Non sooting paraffin containing candle
 INVENTOR(S): Roeske, Alfred D.; Bertrand, Jerome C.
 PATENT ASSIGNEE(S): Cleanwax, LLP, USA
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002005007	A1	20020117	US 2001-755644	20010106
US 6758869	B2	20040706		
US 6852140	B1	20050208	US 2000-670181	20000926
US 2002144455	A1	20021010	US 2001-36825	20011108
PRIORITY APPLN. INFO.:			US 2000-179767P	P 20000202
			US 2000-670181	A 20000926
			US 1999-155848P	P 19990924
			US 1999-159062P	P 19991012
			US 2001-755644	A2 20010106

AB Substantially soot free candles that incorporate paraffin and fatty material (hydrogenated triglycerides (TG) and/or free fatty acids (FFA)) that has a low Iodine Value (IV). The use of low IV fatty material and proper component percentages results in low soot or soot free candles. Paraffin/TG, paraffin/TG/FFA and paraffin/FFA candles are disclosed as are appropriate component percentages and/or IV values to achieve desired low or non sooting characteristics.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L98 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:53532 CAPLUS
 DOCUMENT NUMBER: 126:77354
 TITLE: Gelatinized plant oil for use as candles
 INVENTOR(S): Eini, Meir
 PATENT ASSIGNEE(S): Israel
 SOURCE: Israeli, 23 pp.
 CODEN: ISXXAQ
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IL 109814	A	19960618	IL 1994-109814	19940529
PRIORITY APPLN. INFO.:			IL 1994-109814	19940529

AB A composition for use in illumination, comprising: (a) at least one oil; and (b) at least one gelatinizing agent having 15 or more carbons, selected from the group consisting of fatty acids and fatty acid derivs., in a sufficiently high concentration to gelatinize the oil. The oil is selected from

rose hip oil, wheat germ oil, apricot kernel oil, avocado oil, sunflower oil, evening primrose oil, jojoba oil, corn germ oil, mineral oil, and olive oil. The gelatinizing agent is selected from the alcs. 1-pentadecanol, cetyl alc., 1-heptadecanol, stearyl alc., nonadecanol, arachidyl alc., heneicosanol, behenyl alc., lignoceryl alc., 1-pentacosanol, 1-hexacosanol, 1-heptacosanol, 1-octacosanol, 1-tracontanol, 1-tetracontanol, or 1-pentacontanol or from the saturated fatty acids. Stearic acid, hexacosanic acid, stearic acid Et ester, stearic acid Me ester, stearic acid Pr ester, stearic anhydride, α -hydroxy stearic acid, triglycerides, 12-hydroxy stearic acid, 1-monopalmitoyl-rac-glyceride, 1,3-dipalmitin, 1,2-dipalmitoyl-3-myristoyl-rac-glycerol, and hexadecanedioic acid.

=> d his

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FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

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L13 0 S L12 AND L7

L14 7445 S FRYING

L15 4943 S L14 AND L7

L16 42 S L15 AND L5

L17 0 S L16 AND L1

L18 0 S L16 AND WAX

L19 0 S L16 AND L3

L20 25 S L7 AND L3

L21 0 S L20 AND L5

L22 105455 S WAX

L23 273 S L22 AND L5

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 L43 540881 S EXTRACT
 L44 10010 S L43 AND L30
 L45 2300 S ANIMAL (3W) MATERIAL
 L46 5821 S VEGETABLE (3W) MATERIAL
 L47 0 S L44 AND L45 AND L46
 L48 8 S L45 AND L44
 L49 8 S L44 AND L46
 L50 134369 S HYDROGENATE?
 L51 2691 S L5 AND L7
 L52 107 S L50 AND L51
 L53 1 S L52 AND L22
 L54 10641 S L7 AND COOKING
 L55 499 S L54 AND L50
 L56 4 S L55 AND L5
 L57 4943 S L7 AND L14
 L58 413 S L57 AND L33
 L59 13 S L58 AND L30
 L60 0 S L58 AND L29
 L61 578 S L14 AND L33
 L62 0 S L61 AND L29
 L63 22032 S STERILIZED
 L64 79 S L63 AND L54
 L65 0 S L64 AND L5
 L66 2927 S L30 AND L5
 L67 56 S L66 AND SEPARATE
 L68 2 S L67 AND L50
 L69 160 S RECYCLED (4W) FOOD
 L70 20 S L69 AND L7
 L71 0 S L70 AND SEPARARATE
 L72 0 S L70 AND L43
 L73 0 S L70 AND L45
 L74 1332 S S FOOD
 L75 144 S L74 AND L33
 L76 16 S L75 AND L7
 L77 5 S L74 AND RECYCLE?

FILE 'USPATFULL' ENTERED AT 12:59:04 ON 23 NOV 2007

L78 246712 S FOOD
 L79 154006 S WAX
 L80 27252 S L78 AND L79
 L81 426843 S RESIDUE
 L82 11806 S L81 AND L80
 L83 136 S L82 AND L5
 L84 128 S L83 AND MATERIAL
 L85 118 S L84 AND PROCESS
 L86 4 S ESTERIR?

L87 91988 S ESTERIF?
 L88 53 S L87 AND L85
 L89 5 S L88 AND L1

FILE 'BEILSTEIN' ENTERED AT 13:06:11 ON 23 NOV 2007

L90 85 S FOOD
 L91 2 S CANDLE
 L92 0 S L90 AND L91
 L93 184 S WAX
 L94 0 S L93 AND L5
 L95 18 S TRIGLYCERIDES OR TRIACYLGLYCEROLS
 L96 0 S L95 AND L93

FILE 'CAPLUS' ENTERED AT 13:08:55 ON 23 NOV 2007

L97 47185 S TRIGLYCERIDES OR TRIACYLGLYCEROLS
 L98 13 S L97 AND L1
 L99 1233 S L97 AND WAX
 L100 579 S L99 AND L7
 L101 0 S L00 AND L29

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(FILE 'HOME' ENTERED AT 11:51:22 ON 23 NOV 2007)

FILE 'CAPLUS' ENTERED AT 11:51:33 ON 23 NOV 2007

L1 5464 S CANDLE?
 L2 140 S CANDLE WAX
 L3 108 S CANDLE (4W) MATERIAL
 L4 3048 S FOOD (4W) RESIDUE
 L5 6096 S TRICLYCERIDE OR TRIACYLGLYCEROLS
 L6 0 S L4 AND L5
 L7 1119609 S (FAT# OR OIL#)
 L8 203 S COOKING (3W) RESIDUE
 L9 49 S L8 AND L7
 L10 0 S L9 AND L5
 L11 272 S COOKING (3W) WASTE
 L12 0 S L11 AND L5
 L13 0 S L12 AND L7
 L14 7445 S FRYING
 L15 4943 S L14 AND L7
 L16 42 S L15 AND L5
 L17 0 S L16 AND L1
 L18 0 S L16 AND WAX
 L19 0 S L16 AND L3
 L20 25 S L7 AND L3
 L21 0 S L20 AND L5
 L22 105455 S WAX
 L23 273 S L22 AND L5
 L24 0 S L23 AND L14
 L25 4943 S L14 AND L7
 L26 195 S L25 AND RESIDUE
 L27 0 S L26 AND L5
 L28 2 S L1 AND L5
 L29 54685 S DEHYDROGENAT?
 L30 216440 S LIPIDS
 L31 94 S L29 AND L30

L32 1 S L31 AND L5
L33 1323788 S RESIDUE OR RECYCLE OR WASTE OR REMAINS
L34 118649 S L33 AND L7
L35 2957 S L34 AND L22
L36 12 S L35 AND L1
L37 12263 S COMMUNUT?
L38 1 S L37 AND L4
L39 277 S GROUND (5W) FOOD
L40 6 S L39 AND L30
L41 0 S L40 AND L29
L42 3 S L29 AND L5
L43 540881 S EXTRACT
L44 10010 S L43 AND L30
L45 2300 S ANIMAL (3W) MATERIAL
L46 5821 S VEGETABLE (3W) MATERIAL
L47 0 S L44 AND L45 AND L46
L48 8 S L45 AND L44
L49 8 S L44 AND L46
L50 134369 S HYDROGENATE?
L51 2691 S L5 AND L7
L52 107 S L50 AND L51
L53 1 S L52 AND L22
L54 10641 S L7 AND COOKING
L55 499 S L54 AND L50
L56 4 S L55 AND L5
L57 4943 S L7 AND L14
L58 413 S L57 AND L33
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